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UNIVERSITY OF SOUTHAMPTON

FACULTY OF LAW, ARTS AND SOCIAL SCIENCES

School of Education

**HOW NGAJU DAYAK CHRISTIAN WOMEN IN THREE RURAL COMMUNITIES IN
CENTRAL KALIMANTAN PASS ON THEIR SKILLS, BELIEFS AND VALUES TO THE
NEXT GENERATION**

by

Bridgett Vivian Taylor

Thesis for the degree of Doctor of Philosophy

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UNIVERSITY OF SOUTHAMPTON
ABSTRACT

FACULTY OF LAW, ARTS AND SOCIAL SCIENCES
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HOW NGAJU DAYAK CHRISTIAN WOMEN IN THREE RURAL COMMUNITIES IN
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This research was carried out in three villages in Central Kalimantan, Indonesia, and looked at the ways in which Ngaju Dayak Christian women passed on their skills, beliefs and values to their children. It was an educational, ethnographic, collective case-study which was both descriptive and interpretive. The main data collecting methods were participant observation and ethnographic interviews, undertaken over a two year period from 2007 to 2008. The motivation for carrying out the study was to try to find more effective ways of delivering Christian Education to rural Christian women, based on their traditional ways of teaching and learning.

The research reveals that traditional Ngaju Dayak teaching and learning fits into a situated learning model. I claim that educational practices based upon that model are not necessarily in conflict with a Christian worldview. While this study confirms many of the findings of studies which have been carried out amongst indigenous people in other parts of the world it broke new ground in that it looked for the first time at traditional education methods among the Ngaju Dayak women. It found that the mothers especially, played the dominant role in passing on skills, beliefs and values to their children. Their methods were almost totally informal, frequently modelling or demonstrating in situations where children were present and included. The younger generation learned through observation, participation and imitation and by listening and experimenting. The context for the teaching and learning was the real and meaningful environment of the village, fields and/or family and was almost always connected to 'real-life' situations.

Skills, beliefs and values were passed on orally. Also much was visually transmitted especially through the use of artefacts used in ceremonies. With the advent of local or personal electricity supplies, skills, beliefs and particularly values were also being transmitted via the mass media. Although there were some gender specific roles and mothers were dominant in passing on the skills, beliefs and values, overall there was minimal gender differentiation among the recipients.

The study showed that these Ngaju Dayak women are 'functionally illiterate'. They are able to read and write but their main ways of learning are oral. Story telling, has always played an important role in the lives of the Ngaju Dayak people. Further, it is evident that they prefer visual, kinesthetic, modes of learning to passive, formal ones.

Cultural transmission from parents to children clearly takes place, but with certain modifications. Even though culture was transmitted by the parents and the wider family, motivation and relevance were important reasons for passing on the skills, beliefs and values. In summary, learning and teaching remains strongly influenced by the traditional Dayak worldview.

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DECLARATION OF AUTHORSHIP

I, BRIDGETT VIVIAN TAYLOR declare that this thesis entitled

HOW NGAJU DAYAK CHRISTIAN WOMEN IN THREE RURAL COMMUNITIES IN CENTRAL KALIMANTAN PASS ON THEIR SKILLS, BELIEFS AND VALUES TO THE NEXT GENERATION

and the work presented in the thesis are both my own, and have been generated by me as the result of my own original research. I confirm that:

- this work was done wholly or mainly while in candidature for a research degree at this university;
- where any part of this thesis has been previously been submitted for a degree or any other qualification at this University or any other institution, this has been clearly stated;
- where I have consulted the published work of others, this is always clearly attributed;
- where I have quoted from the work of others, the source is always given. With the exception of such quotations, this thesis is entirely my own work;
- I have acknowledged all main sources of help;
- where the thesis is based on work done by myself jointly with others, I have made clear exactly what was done by others and what I have contributed myself;
- none of this work has been published before submission.

Signed:

Date:

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Chapter 1

INTRODUCTION: SETTING THE SCENE

'I was alright with the practical work but they said I was stupid because I couldn't manage the writing, yet it must be over twenty years since I held a pen!'

(Ibu Helen, Rainbow village)

The above comment was related to me by forty five year old mother of five, Ibu Helen, a Ngaju Dayak Christian woman in a village in Central Kalimantan, Indonesia, after she had attended a work-shop in the city, aimed at helping village people improve their farming skills. It typifies the dilemma of these people and provides the goal of this research. The research aims to discover how the rural Ngaju Dayak Christian women of Central Kalimantan, Indonesia, pass on their skills, beliefs and values to the next generation. This is in order to help the church of Central Kalimantan together with international volunteers like myself, more effectively teach and educate the women so that they can realise their full potential and continue to develop, primarily in their Christian faith.

How and Why I Got Involved with this Research

My interest in this research topic has been driven by the questions and requests of the Indonesian Ngaju Dayak Christian women of Central Kalimantan for help in running more effective Christian women's groups. In this instance the Women's Group referred to the Christian women within the GKE church who were organised into a group which met weekly for Christian worship and teaching and often for social activities.

Whilst teaching on Java, Indonesia's most densely populated and developed island, my initial interest in the island of Kalimantan was aroused by students from that island who were studying in Java. 'We have a Christian University in our city but it's nothing like this' was the comment of two of my students at the large, modern, well equipped, Christian University in East Java, Indonesia, where I taught English and Christian Education from 1993 -1997. Their comment, however, made me curious to know what their city and this particular Christian University were like. After three exploratory visits in 1996 and early 1997, I found myself, in November 1997, in the Provincial capital of Central Kalimantan, teaching in the Christian University.

During my time there, my involvement with the Evangelical Church of Kalimantan (*Gereja Kalimantan Evangelis – GKE*), under whose auspices the University had been founded, and my interest in working with the Christian students to develop and grow their Christian faith, enabled me to take teams of Christian students on many excursions up the rivers of the province to spend time teaching and educating the more remote village congregations. It was during these visits that my interest in the women and their spiritual understanding and growth began to develop as I tried to respond to their further questions and requests. ‘Can you help us with our Christian Women’s Group so that we can function more effectively?’ was typical of the questions that started me on the quest towards a greater understanding of the Christian women in the rural village communities and subsequently to this particular research topic.

The problem of the effective functioning of the women’s groups was also acknowledged by the GKE church who encouraged this research and with whom it was discussed from the outset. The women’s section of the governing body of the church was concerned in 2005 about the lack of effectiveness of a leadership training programme which they had initiated and run for the women in and around one of the areas where this research took place. They commissioned the theological seminary of the GKE to carry out an evaluation of the programme which confirmed their concerns (GKE c. 2005). The reasons given, for the comparative lack of success of the programme concerned the fact that the delegates attending the training sessions often did not understand its purpose and also that although the programme sought to build on previous sessions, the delegates were constantly changing and so no continuity was achieved. It also acknowledged that the material did not meet the needs of the women’s groups. Whilst these were valid reasons, I suspected that the problem was deeper than the reasons put forward above. So I embarked on this study. But who am I and what do I bring to it?

Situating Myself in the Case Study

As kingfishers catch fire, dragonflies draw flame

As kingfishers catch fire, dragonflies draw flame;
As tumbled over rim in roundy wells
Stones ring; like each tucked string tells, each hung bell’s
Bow swung finds tongue to fling out its name;
Each mortal thing does one thing and the same:
Deals out that being indoors each one dwells;

Selves-goes itself; *myself* it speaks and spells,
Crying *What I do is me: for that I came*
(Gerard Manley Hopkins, 1918)

What do I do? For what did I come? Like Gerard Manley Hopkins I have a strong sense of destiny and can resonate with his sentiment, '*What I do is me: for that I came*' but who am I and what have I come to do? Before discovering the second the first needs to be addressed – who is this I?

I have multiple identities, numerous 'I's' as Peshkin (1988) refers to them, even if I take my starting point to be that of a researcher. So who am I really, who is the real me? What sort of researcher am I? Clearly it is important to locate or position myself in my research. Too much has been written to pretend any longer that we can be totally objective in any research we undertake (e.g. Bochner 1997, Hones 1998, Kiesinger 1998). Instead it is time to acknowledge that our very subjectivity can actually be a useful instrument which we can use in the research, provided it is looked at and seen clearly for what it is. As Bentz and Shapiro (1998: 4) say: 'We believe that the person is always at the centre of the process of inquiry – that you will always be at the centre of your own research'.

The research that I have undertaken is a predominately ethnographic study into the traditional ways of teaching and learning of Ngaju Dayak Christian women, in a relatively small ethnic group in the Indonesian part of Borneo. The population was estimated to be around 900.000 in 2009. (Joshua Project 2009). The research question arose in response to a 'real life' problem which had been encountered by the Protestant Christian community to which these women belong. These village women were people with whom I had worked over a period of approximately ten years, although not continuously. I was nonetheless quite well known to them and did not come as a complete outsider. Nevertheless, I am different from them in so many ways that I could never achieve full insider status.

Having established that one of the main ways of collecting the data for the research would be by observation, it was evident that this would involve a fairly prolonged period of time. I lived among the Ngaju Dayak people in each of the three villages selected for the study, for a total of nearly thirty weeks in all in addition to a one month stay in a fourth village at the commencement of the research when I tried to immerse myself in the local language and a fifth village where I carried out some pilot studies over ten weeks. Inevitably, during this time,

the Ngaju Dayak women and myself got to know each other even better. Coffey (1999: 36) claims: 'The definition and location of self is implicitly a part of, rather than tangential to, the ethnographic research endeavour'. I therefore took on the role closest to that of the participant - observer (Gold 1958) where, as the researcher, I participated in many of the activities of the group being studied but let it be known that, on this occasion, I was doing research. But is that what Coffey means by the 'definition and location of self'? Is that who I am? I can position myself according to the research theorists but what other 'baggage' did I take up the river, beside that which could be clearly seen and handled? To answer that question I need to ask myself why I am doing this research. To re-examine my 'why's is to reveal my 'I's' (cf Peshkin 1988).

My ultimate aim is to be able to help the Ngaju Dayak women, living in Central Kalimantan, to grow in their faith by being more able to know, understand and apply the message of the Bible to their everyday village lives in the twenty first century. This however, raises a number of *why* questions. I have identified the following five based on the aim above. Why do I want them to grow in their faith? Why do I think the Bible is the key? Why do I want to teach it to them or at least to some extent help to facilitate their learning of it? Why Ngaju Dayak in Indonesia? Why women?

The answers to these questions lie at the heart of who I am and what is important to me. It enables me to begin to see the values that I bring to the research, and this can help to drive the research but it is also evident that whilst part of my 'baggage' will have positive implications for the research, there will often be negative implications to be aware of and to seek to avoid. I will therefore attempt to identify the various whys and I's and then examine the implications of each for the research.

Why do I want these people to grow in their faith?

This is the 'faith/believing' I, that believes as Augustine said in the fourth century, 'Thou hast made us for Thyself O God, and the heart of man is restless until it finds its rest in Thee' (Augustine of Hippo c.397). This is to believe that to know God is to be whole and complete, to have peace and purpose in our lives. I believe that we are created by a loving God and created in his image (Genesis 1:26-27). We spoiled that image by rebellion and disobedience (Genesis 3:1-19) but God in his love made a way for each one of us to be forgiven and reconciled to him (John 3:16), so that now we can truly say: 'See what love the

Father has for us that we should be called the children of God, and so we are' [*I am!*] (1 John 3:1). I want other people to know that love and to be able to realize their full potential secure in the love of God.

This is a strong motivating force that can encourage perseverance even when physical, mental and spiritual conditions are difficult and when I don't seem to be achieving very much. However, it has to be acknowledged that this can also be a danger in that my beliefs will always colour my perceptions of local beliefs. Much of the culture of the Ngaju Dayak people has its roots in their highly developed animistic religion, commonly known as Kaharingan. Whilst we all filter other people's beliefs through our own belief system, I need to be open and agnostic to these beliefs in order to hear what is being said and to understand what lies at the heart of many of the rituals which are so much a part of Ngaju Dayak culture and everyday life. The Ngaju Dayak people, in common with most of the peoples of the east, do not compartmentalize their religion and beliefs and separate them from other aspects of life, but see and understand life in a much more holistic way. Consequently the line between religion and culture or between the religious and the secular is almost non-existent. A Korean theologian working in Singapore talks about perceiving 'Christian truth in an Asian way, creating harmony between knowledge and practice' (Moonjang 2005: 29). An early anthropologist writing about the Ngaju Dayak says: 'Dayak culture is a unity, that is in the sense that life and thought coincide and are defined by a common focal point through which they must be interpreted and to which they constantly refer' (Scharer 1963:3). Later, writing about the songs that the Ngaju sing, he comments that they 'are also sung to children at home in the evening, so that life shall be in harmony with the sacred life of the ancestors' (p. 9). These key ideas of unity and harmony within Dayak ways of thinking need to be clearly understood insofar as they affect the total world view of the people and impinge on daily living, family values and village life in general.

Why do I think the Bible is the key?

This is part of my 'evangelical Christian' tradition I, that believes the Bible to be the revealed Word of God and therefore able to speak to us still in the twenty first century. The Bible in 2 Timothy 3:16 says: 'All scripture is God breathed and is useful for teaching, rebuking, correcting and training in righteousness so that the man [or woman] of God may be thoroughly equipped for every good work.'

This gives me a solid foundation on which to build my personal beliefs and has from childhood been part of my religious culture. However, as well as the possible negative implications of this strong belief position cited above, it also has to be recognized that the Bible, which I believe to be 'God's Word', has come down to us in written form, as a work of literature. For the people with whom I work, books and literature in any written format are not part of their culture and everyday lives. For the Ngaju Dayak people the written word is generally not accorded the authoritative status that many in the west give to it. They have virtually no written literature; their history is largely oral and memorized. This can clearly be an advantage too, in that stories are a major component of the Bible and the telling of them, in ways that can be easily memorized, will most probably be a major part of any work following on from this research. Nevertheless, the same value and authority accorded to the Bible by evangelical Christians in the west cannot be assumed among the Christian communities of the Ngaju Dayak. Further, to not possess a written history is not to be equated with being ignorant – there are other ways of knowing. I need, as Eisner (1993) claimed 'to try to live a little more with uncertainty and ambiguity in the modes of thought we employ, to question appeals to rationality if this represents only one mode of thought...' (cited in Simons 1996: 234).

Why do I want to help them learn?

This is the 'Teacher' I, who began teaching in 1968 and has continued to teach both informally and formally in churches, schools, universities and colleges in the UK and in East Asia. I don't know where my love of teaching came from but from an early age I knew I wanted to be a teacher.

This too can be a valuable tool for me as a researcher but as a teacher I can be notoriously bad at being passive, non-interventionist. The urge to 'help', to 'put things right' to show a 'better' way of doing it, needed to be firmly controlled if I was to see the traditional patterns of learning and understand something of the traditional ways of knowing.

As a researcher among the Ngaju Dayak women I had sought to understand them better so as to be able to teach them more appropriately. However, I quickly realised that as a researcher engaging in ethnographic research I had much to learn. Throughout the process I came to recognise that I was still essentially an outsider even though I was working in villages that I had previously taught in for short periods of time and amongst people whom I thought I

knew. I had imagined that I could somehow become an insider, merge with the people and be accepted as one of them. As the research progressed I realised that this was neither possible or even desirable for me as a researcher. Nonetheless, as a teacher with much to learn it was essential to lay aside the active 'teaching I' in order to effectively observe and get alongside these women and understand more clearly their challenges and struggles as well as their joys.

Why Ngaju Dayak women in Indonesia?

This highlights a number of different I's. Firstly the 'sent/follower' I. What I mean by this is that this was not really a choice that I made so much as one towards which I have gradually progressed over the years. I began my teaching career in Hampshire, England. During this time I also taught teenagers in the protestant church that I attended. After further training in theology I moved to working with Christian students in the north east of England. An interest in working overseas and particularly in East Asia had been developing, mainly because of friends I had made from Asia. Eventually I applied to a Christian missionary organization and because of my background in teaching and helping young Christians to mature in their faith, they suggested Indonesia. Initially I spent four years there, working with the Church in West Java. I returned to Indonesia in 1993 and taught English and Christian Religious Education in a university in East Java. It was during that time that I met for the first time, and made friends with, Ngaju Dayak people. Some students from Central Kalimantan had been given scholarships to study in East Java and they told me about their provincial capital and the tiny struggling Christian University with a desperate need for people to help. Somewhere in here is the 'justice' I, who is always keen to help the 'underdog' and see fairness and equality where possible. I can also find the 'adventurer' I emerging at this point. Many people do not want to travel to the remoter areas, particularly the hot and steamy, mosquito infested swamp-lands of Central Kalimantan, miles from coast or mountains, flat and forlorn. I, however, was hugely attracted by the whole idea! Eventually I moved to the provincial capital of Central Kalimantan and taught and worked among students there. Part of the programme to train the students involved taking teams to the remoter villages up-river, where I met and grew to love the Ngaju Dayak village people and began to realize how little they really understood of what we were trying to teach them about the Bible and their Christian faith.

All of this can lead to a strong feeling of 'this is where I am meant to be' or to echo Hopkins(1918) again, 'for that I came' – a deeply reassuring and encouraging position to be

in. It can, however, give a sense of having an intrinsic right to be part of these communities, when, in fact, I go always as an invited guest and gain from them far more than I am ever able to give to them. While past experience led me to believe that I would be welcome in these communities, I knew I would always be in the position of having been 'invited in', the guest, essentially still an outsider.

This leads me to the next 'I' also connected with going to live and work among the Ngaju Dayak people of Central Kalimantan, Indonesia. This is a composite I, that of the 'white, rich, foreign, outsider'. The women with whom I work are mainly subsistence farmers, scraping a living from the forest and from fields cultivated out of the tangled rain forest all around them. They had some primary school education, but most did not continue much further. They generally married young, produced a number of children and see the feeding, nurturing and marrying off of these as their main priority in life. Few have travelled beyond the provincial capital, hardly any will venture to another island and rarely will anyone have ever been outside of the country. Travel was traditionally by river and in the late twentieth century mainly by small motorised canoes. The twenty first century has seen the growth of roads, albeit mainly dirt-roads which tend to revert to impassable quagmires in the wet season. These are traversed usually in the comparative comfort of a four-wheel drive vehicle or alternatively by hanging on desperately on the back of a motor-bike.

I am white and so I am regarded as beautiful! I am white in a community where constant toil under the burning heat of a tropical sun has caused the smooth olive skins of their youth to become tanned to a dark and wrinkled brown in many of the older women, a sign of hard work and poverty. To be white is to be considered beautiful, and by implication wealthy, a sign of not having to toil under the heat of the sun, of not having to earn my living by hard manual labour, and thus is a greatly admired and much prized attribute. I may hate the implications of this, regret their implied tendency towards what hooks (1992) describes as 'black self-hatred', but I have to be aware of it even as I seek to help them to see otherwise. Even though the Dayak people can no longer be said to be living in a 'white supremacist order' (p.10), the influence of nearly four hundred years of colonial rule still lingers and is reflected in attitudes such as this.

And I am rich. Working as a research student within a volunteer organisation is not the normal route to riches but I am certainly considered to be rich by the Ngaju Dayak

communities. By comparison with them, I am rich so what am I going to give them? This is always the underlying question and understandably so. In this economy, giving them better education, even encouragement to personal growth as women and as Christian women, is not perceived by them as their greatest need. I needed to be sensitive, generous but wise in the distribution of material goods and money. The research needed to be free from the influence of money and gifts, not leading to women participating in the hope of financial or material gain, and yet I needed to see and be sensitive to their needs.

And I am English, foreign – and always will be. Even though I have worked among these people for more than ten years, I am still not fluent in their mother tongue – we converse mainly in the national language, Indonesian. I am learning, I am improving but I will never be a native Ngaju Dayak nor even a native Ngaju Dayak speaker. So I will have to listen hard, as Gerard Manley Hopkins wrote in *The Habit of Perfection* (1919),

Shape nothing, lips; be lovely-dumb;
It is the shut, the curfew sent
From there where all surrenders come
Which only makes you eloquent.

I needed to learn much and sought to check that what I had interpreted from what I had seen was indeed what had been happening. Obsun and Enriquez (1994: 27) remind us ‘Even the “simple” task of asking questions can have a variety of parameters to make its use in one situation in the same culture different from its use in another.’ I was very dependent on native speaking Ngaju Dayak research assistants. I needed to question, check, ask, discuss and never assume that I had understood or got it right.

Why the Women?

This brings me to my final why and so also to the final I, why the women? Because I too am a woman I feel I can identify more readily with this group and understand more of their concerns. These women are able to be very influential in their families and have much potential for growth in their faith, the older women being able to teach and train the younger women and the children – a potential which does not seem to be being realized at the moment. Nonetheless, the older women have a wealth of wisdom, accumulated over many years. It may not be conventional, academic wisdom, learned from books and taught in the classroom, but none the less they have successfully held their families together for generations. They are strong, multi-gifted people. They know the ways of the rivers, the ways of the forest. They can cook, rear chicken and pigs, weave and make homes out of

wooden 'huts' along the rivers and deep in the rain forests. This is what they are teaching the younger women. I have learnt much from these women. I too am a woman with a certain amount of experience but I must always remember that my learning is different from theirs. In spite of my background and education I will always have much to learn from Ngaju Dayak women.

These are the I's that I have identified that I brought to this research, arising from the why's. I could not divorce myself from the person that I am or become neutral in the research situations in which I found myself. My beliefs, values and background all militated against that. I could, however, and indeed I had to, face up to these values and beliefs, acknowledge and understand my own background, examine my motivation, and then, and only then, could I begin to be honest and open in the research. Which of all these I's is the real I, the real me? All of them!

Outline of the Thesis Contents.

Following this introductory chapter, the thesis is divided as follows:

Chapter 2 sets out the background to the study explaining who the Ngaju Dayak people are, their history, geography, life-style, religion and world view.

Chapter 3 reviews literature from a number of fields, relevant to the study. In doing so I focus on educational theory, Ngaju Dayak culture, indigenous peoples' ways of knowing, aspects of local knowledge and belief and the transmission of culture.

Chapter 4 explains the research design and methodology including a section on the pilot Study which was carried out prior to the main study.

Chapters 5,6 and 7 report on the research findings of the skills, beliefs and values respectively.

Chapter 8 looks at all three domains and asks why certain skills beliefs and values are being passed on and why others are not.

Chapter 9 draws together the findings of all three domains and discusses how skills, beliefs and values are passed on.

Chapter 10 concludes the thesis and considers the implications of the findings, the strengths and limitations of the study and suggests possible ways to implement the findings. Finally suggestions for further research are made.

Chapter 2

THE NGAJU DAYAK PEOPLE

History

The Ngaju Dayak people live in the southern part of the island of Borneo, in the Indonesian province of Central Kalimantan in South East Asia. Although the Dayak people are usually considered to be the indigenous inhabitants of Kalimantan many anthropologists and Dayak historians claim that their original ancestry can be traced back to the "proto-Melayu" people. According to Ugang (1983), probably, sometime in the mists of pre-history, when Kalimantan was still physically attached to the mainland of the continent of Asia, migrations of the Malay or 'Melayu' people displaced the original Negrito people, causing those who were not willing to intermarry with the Melayu incomers to flee to other parts of the archipelago. Thus he suggests the indigenous Dayak people are themselves descended from a mixed race. Ukur (1992) estimates the arrival of the Dayak people in Kalimantan as anywhere between 4000 and 1,500 BCE.

Traditionally the Dayak people lived in longhouses. The communal area in each one, ensured that community life was central to the social structure. Traditional ceremonies and events took place there. It was in the communal area of the longhouse that many of the traditions and customs of the Dayak people were passed on to the next generation through the telling of stories and folk-legends. Today, among the Ngaju Dayak people of Central Kalimantan, the longhouse has all but disappeared even in the rural areas, modern day Dayaks preferring to build separate houses although in the villages these are usually still inhabited by some version of the extended family. Nevertheless the longhouse culture is such an important part of Dayak tradition that any study of Dayak culture can only be understood in the light of this important feature.

The architecture of the 'modern' Ngaju Dayak wooden village house also reflects the same longhouse importance of community with the largest space in the modern house being the communal sitting area, albeit in the twenty first century often to watch together soap operas on the television, relayed by the ubiquitous satellite dish!

However, apart from the television, still very little is experienced by the people of Central Kalimantan of the so called 'global village'. German and later Swiss missionaries penetrated up the rivers to these villages from the second half of the nineteenth century and occasionally I met an older person who remembered meeting one of the later pioneers. Since 1935 the church has been independent of the early missionary organisations and now partners with

them as equals, inviting people from time to time to visit and lecture at the denomination's main Theological Seminary in South Kalimantan.

During the near four hundred years of Dutch colonial rule which ended in 1945, there would have been occasional contact with Dutch officials, but it appears that the village people of Central Kalimantan rarely had direct contact with them. Since Independence in 1945 Indonesia has sought to unite the many diverse ethnic groups into one people with one national language. Foreigners, although welcome, are expected to adhere to the rules and conventions of the country and may travel freely but in practice few, apart from the occasional anthropologist, will reach the villages of Central Kalimantan which are the focus of this study.

Geography

Not only has the Dayak Worldview been shaped to some extent by the longhouse culture but it would appear that the geography of their land has also made a significant contribution. The Indonesian provinces of Kalimantan make up the greater part of the island of Borneo. The Malaysian states of Sabah and Sarawak lie to the north of the island with the Kingdom of Brunei between them. The Indonesian part of the island comprises the four Provinces of East, West, South and Central Kalimantan. The Central Kalimantan province is the traditional home of the Ngaju Dayak people who are one of the largest of the more than 450 Dayak subcultures inhabiting the region (Thomson 2000; Minority Rights Group International 2008).

Most of Central Kalimantan is low lying and characterised by its many rivers, the only means of navigation in the past. It is covered largely by dense tropical rain forest and the soil is often very acidic and unsuitable for intensive agriculture. This may be one of the reasons for the low population density of Kalimantan compared with many of the other islands of Indonesia.

Population and Density

The estimated population of Indonesia in 2005 was around 240 million (Yahoo Education 2005). More than two thirds of the population live on the densely populated island of Java, where the capital of the country, Jakarta, is located. Whereas the national population density rate is 113 per square kilometre, the population density rate of Central Kalimantan in 2007 was a sparse 12 per square kilometre (Indonesian Investment Coordinating Board 2006). The total population of Central Kalimantan in 2006 was 2,004,110 (Indonesian Investment Coordinating Board 2006). The estimated number of Ngaju Dayak in 2009 is approximately

900.000 (Joshua Project 2009), although government statistics for these are very difficult to obtain.

Education, Agriculture and Employment

Employment is a major challenge in Central Kalimantan with 70 per cent of the labour force, deemed to be all those between the ages of 15 and 65 years, getting their living from agriculture. Nearly all villages have a government run primary school but the quality of education is not always as good as the government or the parents desire. The teachers often feel the need to supplement their income with other jobs or at least by tending their fields and so are often absent from the classroom. For children who do complete primary school, progressing to the next level of education can be difficult as often they will have to leave home and live with relatives or keep house for someone in one of the larger centres of population where the lower secondary school is located. With such minimal education it is perhaps not surprising that only a small percentage of those looking for jobs outside of the agriculture sector gain employment each year, leaving a large percentage self-employed or making a living in agriculture/forestry. The majority of those looking for paid employment have moved to the cities.

The traditional Dayak method of farming is often referred to by westerners as swidden or slash and burn agriculture, terms which while to some extent descriptive of the agricultural system are sometimes offensive to the Dayak people who understand them as primitive stereotypes. Nevertheless, the Dayak people continue in their century's old customs of felling small areas of the forest at the start of the dry season, leaving it to dry and then burning the trees in a controlled fashion. Dry-field rice is then planted on the site. The site, however, only remains fertile for one or two seasons and then has to be left fallow in order for nature to replenish the few nutrients the acidic soils once contained. In some areas rubber trees are planted after the rice has been harvested, thus giving a long-term cash crop to the local people. It is debatable how long this custom will remain as the government is increasingly forbidding the burning down of the forest as it is reckoned to contribute to the great 'smoke' problem that engulfs the region when the mass burning takes place in the dry season. Nonetheless, this practice was still continuing in 2007 in villages way 'up-river' away from government controls.

The modern consumer mentality is rapidly making its mark on the Dayak communities and many young people are moving out of the villages into the towns and cities. Nevertheless, the majority still live in rural villages where they continue to cultivate dry-rice, grow a few vegetables and rear a few chickens and keep one or two pigs for their own use. The ancient traditions of hunting and fishing, first documented by Schaerer from information given him by local people and recently collected together by Klokke (2004) explain the traditional ways in which these activities were carried out. Even today hunting and/or fishing will, for most, be a further means of supplementing their meagre livelihood. The collecting of rattan from the forests, small scale lumbering and rubber-tapping from their cultivated rubber trees are the main 'cash crops' that are still derived from the land.

Religion

It is not possible to understand Indonesian life and culture without recognising that religion plays a pivotal role in the lives and thinking of most Indonesian people. Indonesia is a very religious nation with all citizens being required to believe in 'One True God' and to belong to one of the five official religions of Islam, Protestant Christianity, Roman Catholicism, Hinduism or Buddhism. The dominant religion is Islam and, whilst reliable statistics for religion are very difficult to obtain, the US CIA World Fact Book on line (2009) gives the numbers as 'Muslim 86.1%, Protestant 5.7%, Roman Catholic 3%, Hindu 1.8%, other or unspecified 3.4% (2000 census)'. This makes Indonesia the country with the largest number of Muslims in the world. Christians, both Protestant and Roman Catholic, make up almost 9 per cent of the population with around 20 million adherents altogether. Hindus nationally comprise about 2 per cent of the population, centred mainly on the Island of Bali, and Buddhists 1 per cent, presumably hidden within the 'other or unspecified' group above. There are however, significant regional variations with Central Kalimantan, home of the Ngaju Dayak people, having a larger proportion of Christians than many other Provinces. According to the '*Departemen Dalam Negeri, Republik Indonesia*' (Indonesian Internal Affairs Department) web-site (Departemen Dalam Negeri Indonesia, 2005), Christians officially comprise 17.89 per cent of the population of Central Kalimantan, Muslims 70.86 per cent and a significantly larger than the national average number of Hindus – 11.03 per cent, leaving just 0.22 per cent Buddhist. The large number of Hindus is accounted for by the fact that the traditional Dayak ethnic religion of Kaharingan has been subsumed under the Hindu religious banner and is known locally as Hindu-Kaharingan. Whilst still lower than the national average, the number of Muslims in the Province has been inflated by the trans-migrants that the Indonesian government have moved into the area over the years, encouraging people from the overcrowded islands of Java and Madura to re-settle in the sparsely populated provinces of Kalimantan. Those coming have been almost entirely Muslims. The transmigration programme is no longer being carried out by the government.

The largest Christian denomination in Central Kalimantan is the Gereja Kalimantan Evangelis (GKE) or the Evangelical Church of Kalimantan, with over 273,127 members in 2006/7 (GKE 2007). Christianity was first brought to Kalimantan by the Roman Catholic pastor, Antonio

Ventimiglia in 1688 (Ugang 1983). Around one hundred and fifty years later Protestant Christianity arrived, brought to Kalimantan in 1835 by J. Barnstein of the German Barmen Mission (Ukur 2000:9, World Council Churches 2006). Early progress by the Protestants in seeing the Dayak people convert to Christianity was slow and by the turn of the twentieth century there were only about 2,000 Protestant Christian converts. After the outbreak of the First World War the Barmen mission was unable to continue the work but handed it over to the Swiss Basel Mission with whom the GKE have maintained links up until the present day. In 1935 the Church was declared autonomous by the Mission and national Dayak ministers were appointed (Ukur 2000).

The New Testament section of the Bible was translated by the early missionaries into the Ngaju Dayak language as early as 1846 with the complete Bible being published in 1858. In spite of this long history, however, in the late twentieth century it went out of print as the national language of Indonesian is now much more widely used in church services. This is partly so that the church can minister to all the ethnic groups, not just the Ngaju Dayaks but also because the older form of the Ngaju Dayak language and the spelling used in the Bible was no longer understood by the younger generation.

Only at the beginning of the twenty first century was the Bible re-translated into everyday Dayak but it would seem that this too is still not widely used. There is evidence to suggest that although the official literacy rate across Indonesia is quite high, 88 per cent (UNICEF 2000-2004), the level of understanding of many of the people in the rural areas of Central Kalimantan is still very limited. In 2006, SIL, an international organisation working in language development and linguistic research, carried out a preliminary survey among 30 randomly chosen Ngaju Dayak adults in one large village close to the city, with good access to education. The average age of the adults taking part in the survey was 39. They discovered that the average reading ability in the national language, Indonesian, was classified as 'Basic Reader'. This was explained by the researcher as meaning that labels on food packaging could be read, and also uncomplicated, short booklets with pictures concerning topics such as health, science, familiar cultural stories or legends. He described newspapers, magazines, government health pamphlets and instructions that might accompany modern electrical appliances as being very challenging for people of this reading ability (Blake 2006).

Dayak Worldview

Even though by the beginning of the twenty first century many Dayaks have converted to Christianity, inevitably their understanding of their new faith has been filtered through their Kaharingan cultural and religious perceptions. It has often been grafted on to a Dayak worldview that is very different from the worldview of the early missionaries, who brought Christianity to the area, and from the scientific worldview of the west. Worldviews inform our beliefs, shape our culture and, in turn, govern our behaviour. Sire (2004: 17), defines a worldview as:

a commitment, a fundamental orientation of the heart, that can be expressed as a story or in a set of presuppositions (assumptions which may be true, partially true or entirely false) which we hold (consciously or subconsciously) about the basic constitution of reality, and that provides the foundation on which we live and move and have our being.

What, therefore, is the worldview that informs the beliefs of the Ngaju Dayak people, that shapes their culture and governs their behaviour? Two of the most significant studies carried out relatively recently, in English, are those by the anthropologists, Scharer (1963) and Schiller (1997). A number of other studies have been undertaken which also give further light on the subject. Thomson's (2000) unpublished Doctoral thesis is also very informative concerning the Dayak world view in general.

Scharer's central thesis is that the Ngaju Dayak people cannot be understood apart from understanding their concept of God, which he sees as central to their whole culture and worldview. He begins by explaining that, 'The Dayak culture is a unity, that is, in the sense that life and thought coincide and are defined by a common focal point through which they must be interpreted and to which they constantly refer' (Scharer 1963: 3). He then asks,

Where now lies the centre by which the whole of Dayak culture and religion is determined, by which their entire life and thought must be interpreted, and to which everything must be referred? We answer: in the conception of God ... The supreme deities stand at the centre of religious life and thought... these sources show us that the idea of God runs through the whole culture and religion like a scarlet thread, and that in fact it is the focus of life and thought (p. 6).

This idea of God or the sacred running like a thread throughout life means that life is indeed a unity, that there is no compartmentalisation into the sacred and the secular. Ugang makes the same point when he writes: 'It is the strength of the supernatural that makes all the rules of life sacred, whether they are secular or religious' (My translation). (*Kekuatan yang akodrati*

itulah yang membuat seluruh tata kehidupan masyarakat itu menjadi suci (sacral) baik rohani maupun jasmani. Ugang, 1983: 49).

It is essential to have an understanding of the extent to which animistic thinking forms the foundation of the Dayak worldview and how it is seamlessly integrated into all aspects of law, customs, ceremonies and rituals (Thomson 2000: 49).

Thomson (2000:52) goes on to comment: 'The Dayak worldview is one of almost seamless integration of the physical and spiritual or supernatural realms'. Rather than thinking of the spiritual or supernatural dimension as a distinct and separate entity, the Dayak think of it as the unseen realm, in many ways just as substantial or material as the physical world but hidden from view. Ugang (1983: 49) writes:

Ngaju people who are of the Kaharingan religion do not and cannot possibly differentiate between the spiritual and the physical. Everything that is physical and seen is also spiritual. (My translation)

Orang Ngaju yang beragama Kaharingan tidak dapat dan tidak mungkin membedakan mana kehidupan yang rohani dan mana yang jasmani. Segala sesuatu yang visuil jasmani adalah juga spirituil (rohani).

'Natural forces' according to the Dayak understanding, are spiritual forces and spiritual beings. Thus the occurrence of an unusually high tide or particularly good or bad harvest will be understood to have been the result of spiritual intervention. Likewise, an unusually large or old tree or rock, for example, will quite likely be seen to have spiritual significance and be deemed sacred.

Within this integrated worldview it is understandable why maintaining harmony between the spiritual forces, or the unseen, and the physical, or visible world, is of paramount importance. Gaining a livelihood from the forest or the rivers is dependent on the good pleasure of the spirits who are a part of them. Anything that interferes or destroys this harmony will result in failure, at best, or actual physical harm, at worst, to those inhabiting the physical world. Thus all disease, illness, crop failure, flooding or drought and so forth is believed to have a spiritual cause. Conforming to the traditions and customs known as *hadat* is the Dayak's way of ensuring the continuation of this harmony.

Knowledge, including knowledge about the desires and wishes of the deities such as what is auspicious to do at any particular time or at any particular place, is communicated to the people inhabiting the physical world in a number of ways. As Thomson (2000:77) points out:

The Dayak belief that there are other ways of knowing things besides what is experienced through the senses, as in dreams, for example, is an essential component of their worldview. It poses an interesting alternative to Western empirically based epistemologies.

It is not unusual for the spirits of ancestors, spirits of the more recent dead, or spirits in the form of messengers from the gods, to appear or communicate with the living from time to time. A very common way of communicating is through dreams which are nearly always considered to have meanings. A Dayak writer comments,

Dayak people very much believe that dreams at night have a special meaning or it could be said are signs from Ranying [the high god] and the gods, angels, and Sangiyang [spirits] to human beings. (My translation).

Orang Dayak sangat meyakini bahwa mimpi di malam hari mempunyai arti khusus atau dapat juga dikatakan sebagai petanda yang diberikan Ranying dan para Dewa, Malaikat, Sangiyang, kepada manusia (Ukur 1971: 334).

Birds, particularly the eagle, may also bring messages, as well as owls and other birds of the forest. Deer, snakes and even butterflies can also be the indicators of messages. The usual method is by noticing the direction of their flight, where they land, or the sequence of the landing places, all of which can be good or bad omens. The crowing of the cock during the day as it looks from right to left proves that it is really a ghost or supernatural being or person with supernatural powers, in the form of a cockerel. A dog walking with its owner in the forest, that stops suddenly and growls with its tail between its legs is a sign of the presence of a supernatural being somewhere near the dog. And a final example: if a cat is washing its face with its paw in the house it is a sign of a visitor coming (Ukur 1971: 336-342).

Ways of knowing amongst the Dayak people are many and varied and to the western scientific mind at the very least unconventional. However, to the traditional Dayak way of thinking these ways of knowing are perfectly admissible and equal with other more scientific ways. Even the western scientific mind will often acknowledge that spiritual experience or religious understanding defies scientific analysis and that there other 'ways of knowing'. For the Ngaju Dayak, besides these immediate, present day ways of knowing there are also the religious traditions of the ethnic religion which have been passed down from the ancestors from generation to generation.

In order to maintain their religious tradition, Scharer (1963: 8) in the second chapter of his book entitled, '*Sources for the knowledge of the Ngaju conception of God*' cites two main sources, sacred literature and religious drawings. Even with these it is important to

understand how they are transmitted to the people. They have been handed down orally and originally this 'literature' was not read but was in the form of 'songs' i.e. sacred stories or chants recited on ceremonial occasions but also sung to the children at home in the evenings in the longhouses 'so that life shall be in harmony with the sacred life of the first ancestors' (Scharer 1963: 9). The 'songs' tell about the supreme deities believed to inhabit an Upperworld and an Underworld and who created the world and humankind and also gave the laws by which humankind must live. 'They are sacred teachings which determine the whole of life, from birth to death, according to the divine laws' (Scharer 1963: 9).

The 'songs' are unchanging and must be recited as they have been received, not added to or subtracted from. The priest officiating at a ceremony or function will end his recitation of the songs by saying 'This is the divine revelation which we follow and in accordance with which we make our offering. We have changed nothing in it, but have recited it as it was handed down to us by our forefathers' (Scharer 1963: 10).

The language used to transmit these 'songs' is the language of the gods, *basa sangiang*, given to the first men and transmitted from one generation to another until the present day. It is a language used only for the recitation or singing of sacred material; the ordinary everyday language is used for the reciting and telling of other stories.

Another way of transmitting the 'sacred literature' is through the priestly chants. When these are being chanted at a religious rite, it is believed that the gods themselves inhabit the person and speak through them. These chants are only transmitted from priest to pupil. The pupils are forced to learn them by rote until they know them by heart and are accomplished in the religious rites.

Religious drawings are another means of transmitting beliefs. Many priests have drawings of the Upperworld and Underworld, made within the last fifty to seventy years, which they use when reciting the chants relating to these particular realms. These visual representations clearly help in understanding these concepts.

As mentioned above, staying at peace with the gods and spirits and conforming to the traditions and customs known as *hadat* is the Dayak's way of ensuring the continuation of harmony. Thus the transmitting of culture from generation to generation through the *hadat*, sometimes translated 'laws', is of great importance. Scharer translates the word 'hadat' with

both the words 'laws' and also 'customs'. He admits, however, that the word is very difficult to translate as we do not have an English equivalent; therefore he chooses to paraphrase the meaning saying:

We can only grasp and interpret its significance through the conception of God. Seen in this context the notion has a double meaning. Firstly that of divine cosmic order and harmony, and secondly that of life and actions in agreement with this order. It is not only humanity that possesses *hadat*, but also every other creature or thing (animal, plant, river, etc.), every phenomenon (e.g. celestial phenomena), every period and every action, for the entire cosmos is ordered by the total godhead and every member and every part of the cosmos possesses its own place in this order, allocated by the total godhead, and has to live and act according to this ordained place (Scharer, 1963: 74-75).

Furthermore these laws or customs are considered normative for all Ngaju Dayak people. Any new ideas cannot simply be received and added to the old but must be 'seen and interpreted as from time immemorial, it must be established according to the divine revelation and order' (1963: 9), Scharer goes on to comment that thought is imprisoned in belief and as such is outside of logic.

However, lest we should be left thinking that Dayak culture is immutable and that it is impossible for anything to change, Schiller's work gives a different perspective. She is concerned with 'Religious Change Among the Ngaju of Indonesia.' Writing over thirty years after Scharer, she shows the way in which traditional ceremonies and customs are having to change in order for the Ngaju Dayak to maintain their identity in the twenty first century. She writes, 'I suggest that in their quest to fashion a public persona, Ngaju Dayaks are manifestly rethinking their ritual practices and their various roles in them' (Schiller 1997: 7). Baier (2007:124) goes further and suggests:

Although single elements, ways of expression, words, and names may derive from ancient, native belief, Hindu Kaharingan deserves to be called a new religion, one that was shaped by modern, educated individuals.

Other Aspects of Dayak Culture

Beside the religious dimension of the Dayak worldview a number of other aspects of Dayak customs and ways of thinking will impact on the research. An interesting way of looking at the culture is Lanier's (2000) contention that the world can largely be divided into two kinds of cultures. Living as they do in the southern part of the island of Borneo, in the Central Kalimantan province of Indonesia, the Ngaju Dayak people are part of the Asian continent

and therefore part of what Lanier has called 'hot-climate' cultures. 'Hot climate' are relationship based cultures and those she designates 'cold-climate' are task-orientated cultures. Most Asian cultures, including Indonesian, would fall into the 'hot-climate' culture category. Whilst this might be an oversimplification it is true to say that Dayak people are, generally speaking, more relationship orientated than task orientated. Indeed, I often wondered how civil servant friends, working in their offices, could suddenly appear in the middle of the morning to accompany me to the airport. The answer is of course because the guest is much more important than the paid job and the employer and colleagues will quite understand the necessary absence for an hour or two.

Other 'hot-climate' characteristics which Lanier notes are being more indirect in their communication rather than direct, having more of a group identity than an individual one and generally being inclusive rather than having the more western or 'cold-climate' private attitude. All of these characteristics are reflected in Ngaju Dayak society and each had a bearing on the research. For example, I needed to examine whether I was getting answers based on some sort of 'objective truth' or the stories people thought I would like to hear in order to be more friendly – the relational aspect dominating. The extent to which I was accepted in the group depended to a large extent on knowing and adhering to the cultural norms. For example, writing about a neighbouring group, the Ma'anyan people, Hudson and Hudson (1978: 218) remind us that: 'There are institutionalized modes of behaviour that control the *ideal* relationships of different classes of kinsmen...Persons of higher generation are to be treated with overt deference'

Family Structure

As suggested earlier, the structure of Dayak society is changing. No longer do the Ngaju Dayak people live communally in longhouses. The move to single dwellings has restricted the space available for the extended family and as many Dayak move to the towns and cities the nuclear family is becoming more and more the normal pattern. Nevertheless in the rural areas and among many town and city dwellers the old patterns are still very evident. Many city dwelling families have nieces and nephews from the villages living with them and continuing their education in exchange for doing the housework. Often married children live for a time in the family home with the parents. Grandparents frequently move back into their children's homes as they become less able to look after themselves. In the rural areas the patterns are changing too but the presence of at least three generations living under one roof is still quite common.

Indonesian Research into Dayak Culture

The Dayak people and the people of Central Kalimantan, have not only been the subject of research by anthropologists and other researchers from outside of the country (e.g. Baier 2007, Scharer 1963, Schiller 1997, Thomson 2000), but have also been the focus of a number of studies by Indonesian researchers. The latter have sought to document the culture of different ethnic groups across Indonesia. In addition the local government in Central Kalimantan carried out two projects in 1992/3 one of which was concerned with discipline in the towns and the other, more relevant to this research was entitled: '*Pembinaan Budaya Dalam Lingkungan Keluarga*.' (Upholding Customs Within the Family) (Usop 1993). The projects aimed: to '*memberikan sumbangan pikiran untuk pengembangan Kebudayaan Daerah Kalimantan Tengah*.' (To give food for thought for the development of culture in Central Kalimantan). A further series of three studies was commissioned by the *Departemen Pendidikan dan Kebudayaan* (Department of Education and Culture) of Central Kalimantan in 1995/6. These included a study led by Rampai (1996) *Fungsi Keluarga Dalam Meningkatkan Kualitas Sumber Daya Manusia di Kalimantan* (The Function of the Family in Improving Human Resources in Kalimantan) referred to later in this thesis as the findings regarding the values of the Dayak people were the ones used as the basis of the values questions in this research. The introduction to Rampai's report informs the reader that the other two studies in the series focused on: 'The change in the Role of Village Women in Central Kalimantan in the Context of Village Development' and 'National Integration, a Way of Looking at Central Kalimantan Culture' (Rampai 1996:1). These studies reflect the interest of the local government in Central Kalimantan to preserve and develop local culture. While religious beliefs of Rampai and his co-researchers are unknown, as Indonesians they must, according to the constitution, belong to one of the five accredited religions of Islam, Protestant Christianity, Roman Catholicism, Hindu or Buddhist.

It is pertinent to my research to note that the other main source of local, Indonesian interest in researching and documenting life in Central Kalimantan has come from the Christian historian/theologians who have been keen to document the history of the Protestant Church (e.g. Ukur 2000) or to seek to understand and explain the culture in the light of later conversion to Christianity (e.g. Ugang 1983)

The Research Question

With a clearer picture of who the Ngaju Dayak Christian women are I returned to their earlier request: 'Can you help us with our Christian Women's Group so that we will function more effectively?' To do this I needed to gain a greater understanding of how the Ngaju Dayak people learn and teach traditionally in order to help in the ongoing formulation of contextually appropriate and relevant teaching methods for these rural communities. In the light of this the central research question was framed, which was:

'How do Ngaju Dayak Christian women in three rural communities in Central Kalimantan, pass on their skills, beliefs and values to the next generation?'

Although no-one, to my knowledge, has asked this specific question of these particular people, a great deal has been written in many different fields that has direct and indirect bearing on this subject. A selection of that literature is addressed in the following chapter.

Chapter 3

LITERATURE REVIEW

Introduction

This research concentrates on how the Christian women of Central Kalimantan traditionally teach and learn, which raises a number of other broader basic questions concerned with learning theories relevant to the study, ways of knowing among indigenous peoples and theories of cultural transmission. Each will be addressed in this chapter through a study of the relevant literature beginning with clarification of the terms used in the study. The outline of the chapter is as follows:

Firstly I define the terms as used in this particular research including, what is meant by knowledge and skills, beliefs and values. I will then seek to establish which theoretical insights underpin or at least inform the research. I begin by looking at learning theory and seeing which theories or aspects of theories might under-gird this study. At the same time I try to ascertain which aspects of learning theory might be applicable to the traditional, informal learning situation of the Ngaju Dayak Christian people of Central Kalimantan. Thirdly, alternative ways of knowing and learning are considered, looking at the wide divergence between eastern and western understandings. Fourthly I examine the literature connected with the learning of indigenous people in general, and more specifically, what is known about how indigenous peoples learn and how they transmit the knowledge of their skills, beliefs and values to the next generation. Fifthly I look at some of the literature on indigenous beliefs and practices in the specific areas of pregnancy and childbirth, death and burial rituals and magic and superstitions. I conclude by considering briefly the meaning of cultural transmission theory. It should be noted that whilst these areas can be described as discrete sections, in practice there is a degree of overlap between them.

Defining the terms

Knowledge

From the classical period until the present post-modern era, the question of what is meant by knowledge and how knowledge is defined and organized has been debated by philosophers, psychologists, educationalists, academics and theorists from many varied disciplines. Theories range from Aristotle's classification of disciplines into three major groups, the 'theoretical', the 'practical' and the 'productive', to the post-modernists who would claim that reason itself is a social construct and therefore: 'The shape of knowledge – the acceptable

statements within it, the modes of verifying what is true, the valid modes of enquiry – are legitimated more often than not by those who are in positions to define what counts as knowledge' (Pring 2004: 224).

From the enlightenment, through the subsequent era of 'modernism', there existed, as a foundational characteristic, a belief in the ideal of a complete scientific explanation of physical and social reality. From this, knowledge or bodies of knowledge could be built. Knowledge came to be described as something that 'depends on a publicly agreed framework of justification, refutation and verification' (Pring 2004: 221).

Phenix (1964), writing at a time when the discussion of the meaning and content of the school curriculum appeared to be the chief concerns of education, talks about the place of music in the curriculum and goes on to discuss whether or not 'esthetics' (*sic*) should be included under the term of knowledge. He informs us that: 'Some prefer to limit the term "knowledge" to the strictly discursive and cognitive fields (i.e., mathematics and empirical science). Others prefer a wider reference, comprising meanings in other realms, including the esthetic (*sic*)'. However, he concludes that: 'The question is not of much importance.' The important thing, he argues, is that whatever they are called the distinctive meanings in each realm should be acknowledged and understood (Phenix 1964: 142). Taking Phenix's advice I shall attempt to acknowledge and explain the meaning of each of the terms used in the research.

There has been a great deal of debate and much has been published, particularly in the last decade, concerning 'Indigenous Knowledge' or 'Indigenous Ways of Knowing' as distinct from western or Eurocentric scientific knowledge, (e.g. Aikenhead and Ogawa 2007; Battiste 2000). Aikenhead and Ogawa (2007: 553-554) distinguish between the noun 'knowledge' which they say is what is generally meant by the term when used in English, i.e. 'something that can be given, accumulated, banked and assessed by paper and pencil examinations' (2007: 553), something which is 'separate from the knower,' and indigenous 'ways of living'. Using Cajete's (2000) phrase they talk about 'coming to know' or 'coming to knowing' a phrase used by Peat (1994) i.e. an ongoing process of discovery. 'An Indigenous coming to know is a journey toward wisdom or a journey in wisdom-in-action, not a destination of discovering knowledge' (Aikenhead and Ogawa 2007: 553). They therefore prefer the phrase 'Indigenous ways of living in nature' to describe indigenous knowledge/ways of knowing and the phrase 'scientific knowledge' to describe the 'Eurocentric' understanding of knowledge. I

shall use the short-hand terms 'scientific knowledge' to refer to the western-style knowledge and 'Indigenous ways of knowing' to refer to indigenous ways of living in nature.

Originally in this research I had intended to explore what I described as 'factual knowledge', or what most closely equates to Aristotle's 'theoretical' discipline, 'whose aim is to know' (Schwab 1975: 256). However, I discovered that this concept does not really exist as far as Indigenous people are concerned. This became obvious as I began my research among the Ngaju Dayak and discovered this 'knowledge' category or domain in my analysis was virtually absent as a separate, discreet domain. Knowledge was almost always the knowledge of how to do something or maintain something; the knowledge of consequences if taboos were ignored etc. 'Knowledge' as an end in itself, would seem to be quite foreign to the Ngaju Dayak people. It has been posited that knowledge as an end in itself is a very western view. Tweed and Lehman (2002) compare and contrast Socratic and Confucian approaches to learning claiming that Confucius had a pragmatic approach to learning and did not endorse the idea of learning simply for the sake of learning.

The American Association for the Advancement of Science has published a *Handbook on Traditional Knowledge and Intellectual Property* (Hansen and Vanfleet 2003:3) in which it defines 'traditional knowledge' as:

Information that people in a given community, based on experience and adaptation to a local culture and environment, have developed over time, and continue to develop. This knowledge is used to sustain the community and its culture and to maintain the genetic resources necessary for the continued survival of the community.

This definition fits well with the definitions of Indigenous knowledge or ways of knowing outlined above.

Pring writing against the background of post-modernism at the beginning of the twenty-first century, thinks that the concept of facts 'seems to be as elusive as "truth"' which he had found extremely difficult to explain satisfactorily. However, he continues: 'And yet, certainly at the common sense level, we talk quite happily about facts.' He illustrates this by talking about a head teacher after a disturbance, trying to ascertain the facts, i.e. what actually happened, as opposed to fictitious accounts of what happened. (Pring 2004: 216). Again he writes 'Facts'

refer to those features of reality, described in one way or another, which enable us truthfully to make certain statements' (p. 217).

It will become evident in the course of the research that whilst there is almost certainly 'knowledge' that the Ngaju Dayak people wish to pass on to future generations, this is not knowledge for the sake of knowledge. It is always within the context of the lived lives of the Ngaju people. It is also clearly coloured by their worldview, which was examined to some degree in the previous chapter and which is considered further as the data is analysed, but which views reality, and therefore truth, in a rather different way from the western mind. Therefore, when referring to the Ngaju Dayak people it has to be borne in mind that although facts may still be said to refer to features of reality, that reality is not necessarily western, scientific reality, and when Pring talks about enabling us to truthfully make certain statements, truth also has to be understood within the concept of reality embraced by these people.

Skills

The second concept that needs defining is that of skills. This is closely related to the concept of practical knowledge as outlined above. It could be argued that skill is 'knowledge in practice'. For Jarvis (2004: 11) skills are a dimension of practical knowledge. He writes: 'Rather than distinguish knowledge from skills since we do not perform skills mindlessly, I want to combine them and to consider the combination as practical knowledge'. He explains that this practical knowledge has a minimum of six dimensions, one of which he calls 'process knowledge – knowledge of 'how' to do it.' Another he terms 'skill – the ability to do something' (p. 11). Jarvis reminds us that this practical knowledge also relies on experience or what he refers to as 'everyday knowledge'; that it encompasses 'attitudes, beliefs, values and emotions' and 'tacit knowledge' – the ability to perform some task apparently without needing to think about it (p. 11). Skill or the knowledge of how to do something and the ability to do it correspond most closely with Aristotle's 'productive' group, by which he meant the disciplines devoted to making things. In the course of this research I was interested in discovering how wide was the repertoire of skills possessed by the Ngaju Dayak women and how they were being passed on to the next generation, meaning how many different practical tasks they knew how to fulfill and were actually able to carry out. Skills are therefore defined here as both knowing how to do something and having the ability to do it. It includes tacit knowledge and experience.

Beliefs

The third definition needing clarification is what is meant in this research by the term 'beliefs'. Whilst beliefs and values are not actions in and of themselves, they do, hopefully lead to actions and in that sense the Aristotelian idea of the 'practical' disciplines probably equates most closely with knowledge about beliefs and values among the Ngaju Dayak people. Aristotle's practical actions were those based on deliberate decisions and carried out for their own sake, they are 'the activities that stem from the expression of the best of which each man is capable' (Schwab 1975: 257).

Praxis, or the form of reasoning appropriate to the practical sciences 'remakes the conditions of informed action and constantly reviews action and the knowledge which informs it. Praxis is always guided by a moral disposition to act truly and justly' (Carr 1986:33). I would suggest that beliefs inform this moral disposition.

The concept of beliefs as understood by the Dayak people is broader than the Aristotelian view of the practical disciplines though, and again has to be understood in the context of the Dayak worldview. As outlined in chapter 2, it is a world view which makes no distinction between the sacred and the secular and sees it all as a unity; which does not distinguish between the spiritual and the natural world. The beliefs domain encompasses popular stories, folk-tales and what is generally believed by the people about their world. Thus, like factual knowledge, beliefs are informed by the Ngaju Dayak worldview. Beliefs, being by their nature internal, are difficult to research using ethnographic observation and interviews. It was therefore decided in this research to focus on a limited number of beliefs which were explicitly or implicitly demonstrated by actions.

Values

The final definition is that of 'values.' 'Facts', theory and descriptions of reality are interconnected concepts' (Pring 2005:217). Pring claims that it is partly because this has not been recognized and because 'facts' have somehow been seen as 'discrete and observable events', that a distinction has been made between facts and values. He quotes Hume's famous statement, that you cannot derive an 'ought' from an 'is'. Nevertheless, he then states that this 'radical separation of fact from value is difficult to maintain, especially since facts relate to the descriptions we give of the world and those descriptions incorporate evaluations...Values permeate our descriptions of reality' (p.218).

A particularly broad and general definition of values is put forward by Hofstede (2001) for whom : 'A value is "a broad tendency to prefer certain states of affairs over others"' (2001:5). Others have defined values as, 'both emotional commitments and ideas about worth' (Fraenkel 1977: 11) or 'those things, objects, activities, experiences, etc. which on balance promote human wellbeing' (Beck 1990: 2).

Rokeach (1968: 159-160), seeking to differentiate values from attitudes, put forward the definition of values as, 'an enduring belief that a specific mode of conduct or end-state of existence is personally and socially preferable to alternative modes of conduct or end-states of existence'. He continues that having been internalized, a value becomes a standard for guiding actions, justifying attitudes and actions and making moral judgements. Particularly pertinent to this study is his comment that: 'Finally, a value is a standard employed to influence the values, attitudes, and actions of at least some others – our children's for example' (p. 160).

One of the most useful and comprehensive explanations is that of Halstead (1996:5) who defines values as:

principles, fundamental convictions, ideals, standards or life stances which act as general guides to behaviour or as points of reference in decision making or the evaluation of beliefs or action and which are closely connected to personal integrity and personal identity.

In this research, however, values have been more broadly defined than just the principles which guide behaviour. The categories are not as tidy or as tight as they might be. However, it is important also to remember that values are strongly influenced by culture. They are deeply rooted in the society and group where they are held. Ngaju Dayak values have been influenced, and are being influenced, by a multiplicity of social factors ranging from the beliefs of the ancestors, family and village values and ideas beamed in from the other side of the world on their televisions via satellite dishes. There is also a very close relationship between values and beliefs and it could be argued that some of the values highlighted in this research are in fact beliefs, for example 'family' and 'education'. In as far as the research is seeking to establish how skills, beliefs and values are passed on, the results are not affected by the categories into which the items are placed. The actual starting point in this study for discovering the values held by these Ngaju Dayak women was a set of values that had previously been identified by local Indonesian and Dayak researchers (Rampai 1996). This was broadened from the observation data to include other beliefs and behaviours which the

women considered to have value and which they were wanting to pass on to their children. These were the criteria that were finally used to define the values in this research.

Learning Theory

Whilst it may be true that 'Learning is something that happens quite naturally and goes by unnoticed in many cases' (Pritchard 2005: vii), it is also evident from the considerable amount of literature available that the question of just how learning takes place has become a major focus for many researchers, and educationalists particularly, over the last hundred or so years, who are asking such questions as: How do we know anything? How is knowledge acquired? How is knowledge transmitted? How do we believe learning takes place?

Whilst these may seem to be fundamental and obvious questions they are ones that have been widely discussed and debated throughout the twentieth century and continue into the twenty first century despite having their origins at least as far back as the early Greek Philosophers in the fifth and fourth centuries BC. Even at that early stage there would seem to be very little consensus of opinion regarding the acquisition of knowledge. For Socrates knowledge was finding the essence of things:

To know something, according to Socrates, is to understand its essence. It is not enough to identify something as beautiful; one must know *why* it is beautiful. One must know what *all* instances of beauty have in common; one must know the essence of beauty (Hergenhahn 1997: 36).

Plato, Socrates' student, believed in inherited knowledge and the need for reflection into your own mind in order to find that innate knowledge, which was at variance with Aristotle's view of knowledge being empirical, acquired through sensory experience and not inherited. And yet even here the distinction was not entirely clear cut. As Hergenhahn and Olsen (2005:29) point out: 'Although Plato believed that knowledge is inherited and Aristotle believed that it is derived from sensory experience, both exemplify rationalism because both believed that the mind is actively involved in the attainment of knowledge'.

All of the above, however, emanate from western philosophers and western ways of thinking and learning. Whilst it may prove to be possible to interpret Ngaju Dayak ways of learning and teaching in the light of western educational theory, the essential differences between western and eastern ways of learning must not be underestimated. Tweed and Lehman (2002), referred to above, have drawn attention to the fundamental differences between a Confucian and Socratic approach to learning. They summed up the different approaches in the following ways:

Socrates tended to question his own and others' beliefs, evaluated others' knowledge, esteemed self-generated knowledge, began teaching by implanting doubt, and sought knowledge for which he had good reasons (Tweed and Lehman (2002: 90).

Confucius' approach to learning however, 'markedly contrasts with that endorsed by Socrates.'

Confucius served as a teacher who educated men with an eye to putting them into civil service positions. He believed the role of civic administrator held importance for improving society. Confucius values effortful learning, behavioural reform, pragmatic learning, acquisition of essential knowledge, respectful learning (p. 91).

It can be seen from these very different approaches to learning today, influenced by very different philosophies, that approaches to learning will be very different for the Chinese-influenced learner and for the western-influenced learner. It could not be assumed before the commencement of the study that Ngaju Dayak learners would be Chinese-influenced learners although proximity to China and the influence of the Chinese in the history of Indonesia would indicate a strong possibility of that being so. Clearly any theory of education which is thought to inform Ngaju Dayak ways of learning and teaching will need to take this into consideration although that is not say that theories of learning which are predominately western cannot also be important guideposts in helping to establish a theoretical framework for Ngaju Dayak learning.

Of the multiplicity of such learning theories, past and present, it has to be decided which will best serve to point towards a theoretical framework for understanding the learning processes of the Ngaju Dayak people. As Hamilton and Ghatala (1994:7) have claimed, 'No single learning theory accurately reflects the facts of the total domain of human learning'. As such, a combination of theories seems most helpful.

Pritchard (2005: 95) maintains that there is a place in our understanding about learning for:

behaviourism, cognitive and constructivist theory, including situated learning, metacognition, and social constructivism; for an understanding of learning styles and multiple intelligence theory; and for a knowledge of what the neuro psychologists, and others are discovering about effective learning contexts.

Whilst the teachers to whom Pritchard was primarily addressing his remarks may well benefit from an understanding of the whole range of learning theories, this research will try to limit itself to one or two.

Behaviourist theories, whilst not without their uses, but with their emphasis on the 'analysis of observable stimulus-response events, not ascribing purpose or intention to behaviour and focusing only on the laws of behaviour' (Hamilton and Ghatala 1994: 18 - 19) offer too simplistic a view compared with later cognitive and constructivist theories and particularly when compared with more recent situated cognition and social cognition theories. The two particular aspects of learning that appear especially relevant to this research are the idea that learning is situated and that learning is a social process.

According to McLellan (1996: 5) the situated learning model was launched in 1989 in an article by Brown, Collins and Duguid entitled 'Situated Cognition and the Culture of Learning' published in *Educational Researcher* (1989, 18 (1): 32-42). 'The authors argue that knowledge is situated, being in part a product of the activity, context and culture in which it is developed and used' (Brown, Collins, and Duguid, 1989: 32).

Key components of the model are stories, reflection, cognitive apprenticeship, collaboration, coaching, multiple practice, articulation of learning skills and technology. According to Brown, Collins, and Duguid (cited in McLellan 1996: 7) the learner is the 'cognitive apprentice', learning on the job and learning by doing – learning in context. They explain that:

The breach between learning and use, which is captured by the folk categories "know what" and "know how," may well be a product of the structure and practices of our education system. Many methods of didactic education assume a separation between knowing and doing, treating knowledge as an integral, self-sufficient substance, theoretically independent of the situations in which it is learned and used (Brown, Collins, and Duguid 1996:19-20).

They subsequently claim that recent investigations of learning challenge that separation of what is learned and how it is used, arguing that:

The activity in which knowledge is developed and employed...is not separable from or ancillary to learning and cognition. Nor is it neutral. Rather, it is an integral part of what is learned. Situations might be said to co-produce knowledge through activity...Learning and cognition, it is now possible to argue, are fundamentally situated (p.20).

They write too, of learning being a process of enculturation whereby the learner picks things up from the ambient culture rather than being explicitly taught them. They also point out that the learner needs to be 'exposed to the use of a domains conceptual tool in authentic activity' (p.25). This concept of situated learning may be relevant to the Dayak people in their approach to learning and will be explored as part of the study.

A development of situated cognition theory is what Lave and Wenger have called their 'new analytical viewpoint on learning' and which they termed 'legitimate peripheral participation' (Hay 1996: 90). Lave and Wenger (1991:29) point out:

Learning viewed as situated activity has as its central defining characteristic a process that we call *legitimate peripheral participation*. By this we mean to draw attention to the point that learners inevitably participate in communities of practitioners and that the mastery of knowledge and skill requires newcomers to move toward full participation in the socio-cultural practices of a community.

They continue: 'In our view, learning is not merely situated in practice - as if it were some independently reifiable process that just happened to be located somewhere; learning is an integral part of generative social practice in the lived-in world' (Lave and Wenger 1991: 35).

Perhaps most relevant to the village people of Central Kalimantan and their ways of learning, is what they say about where learning takes place. Hay (1996: 90) discussing their work says 'Learning is portrayed as 'an integral part of generative practice in the lived in world' and 'an aspect of all activity,' rather than 'the isolated thing we do in schools'.

Thus I have introduced the concept of the social dimension of cognitive theory and whilst social cognition may be a more recent theory it has its roots in earlier theories. That learning is a social process was clearly demonstrated by the work of the social constructivists, especially Vygotsky and Bruner. Hamilton and Ghatala (1994: 252) point out that 'learning is at the core of his [Vygotsky's] view of cognitive development'. Vygotsky and Bruner have shown that learning is an interaction between learners.

Vygotsky's Zone of Proximal Development (ZPD) has shown the value of 'adult guidance' or 'more capable peers' (Vygotsky 1978: 86). Explaining the zone of proximal development he writes:

It is the distance between the actual developmental level as determined by independent problem solving and the level of potential development as determined through problem solving under adult guidance or in collaboration with more capable peers.

The 'scaffolding' provided by the adults or 'more capable peers' (p. 86) in the ZPD is a crucial aspect of the learning process, enabling the learners to progress through the ZPD to accomplish tasks they would otherwise have found to be beyond their ability. Tudge is concerned with the role of peers in this process but points out that most of the upsurge in

interest in the work of Vygotsky in the mid 1980s 'centred on the role adults play in fostering children's development' (Tudge 1990: 155). He reports on a number of research projects undertaken with children and comments: 'In all cases, children who collaborated with an adult (generally a mother) were most likely to complete the task successfully' (p. 156).

This social aspect of situated cognition/social cognition theory is relevant to research into Ngaju Dayak people's ways of learning, given that the 'group' is known to be an important unit in all decision making in the society.

Lave (1997) has written about knowledge being obtained by the processes described as "way in" and "practice". '*Way in* is a period of observation in which the learner watches a master and makes a first attempt at solving a problem. *Practice* is refining and perfecting the use of acquired knowledge' (Stein 1998: 3). The nature of practice as described here may be relevant to the way Dayak groups pass on skills.

Bandura and other researchers have also put forward social theories of learning. In 1986 Bandura renamed his theory 'social cognitive theory'. Hamilton and Ghatala (1994: 289) point out that 'cognitive theorists primarily study the acquisition of knowledge by individuals, while Bandura bases many of his principles on studies of social interactions, that is, on the interaction of two or more people'. Bandura's (1986:18) view of the relationship of behaviour, person and environment as a three-way reciprocal process or 'triadic reciprocity' is also interesting given the close interaction between indigenous peoples and their environments (Hamilton and Ghatala 1994: 290). Furthermore, since Indonesians and indigenous peoples are known to be much more interdependent and group centred than western peoples, social theories of learning will clearly be important in this research.

Rogoff (1990: 7) building on the work of Vygotsky, Leont'ev, Bruner, Piaget, Cole, Whiting, Wertsch, and Trevarthen, presents a 'framework for conceptualizing the development of mind in socio-cultural context'. She points out that whilst from the 1980s it has been realized that there needed to be a development from Piaget's work, concentrating mainly on individual development, to the recognition that cognitive processes may differ according to the domain of thinking, this was still limited. Therefore she notes: 'A broader view of cognition and context requires that the task characteristics and cognitive performance be considered in the light of the goal of the activity and its interpersonal and socio-cultural context.' (p. 6) She

continues: 'The purpose of thinking is to act effectively; activities are goal directed (tacitly or explicitly), with social and cultural definition of goals and means of handling problems' (p. 6).

Further Rogoff (p. 7):

considers children as apprentices in thinking, active in their efforts to learn from observing and participating with peers and more skilled members of their society, developing skills to handle culturally defined problems with available tools, and building from these givens to construct new solutions within the context of socio-cultural activity.

From this Rogoff develops the idea of 'guided participation' 'to suggest that both guidance and participation in culturally valued activities are essential to children's apprenticeship in thinking. Guidance may be tacit or explicit, and participation may vary in the extent to which children or caregivers are responsible for its arrangement' (p. 8).

Rogoff's (p. 8) ideas of thinking as 'functional effort to solve problems' and on development as 'progress in skill, understanding, and perspective regarding problems and their appropriate solution, as defined by the local culture' appear to be much closer to a traditional informal pattern of learning rather than to the formal school system. She explains that whilst her theories are consistent with the Vygotskian approach, she has placed more focus on the role of children as active participants in their own development. 'Children seek, structure, and even demand the assistance of those around them in learning how to solve problems of all kinds. They actively observe social activities, participating as they can. I stress the complementary roles of children and caregivers in fostering children's development' (Rogoff 1990: 16). She continues:

My point is that through children's everyday involvement in social life, "lessons" regarding skilled and valued (or at least necessary) cultural activities are available to them. It is part of the nature of communication, perhaps especially the communication between children and caregivers (whether adult or child), that these cultural lessons are somewhat tailored to the particular child. It is part of the nature of children to seek the meaning - the purpose and connotation - of what goes on around them, and to involve themselves in ongoing activity (p.18).

Thus Rogoff's development of situated cognition and socio-cultural cognition theories may provide a sound theoretical framework for the research into the ways in which the Ngaju Dayak people of Central Kalimantan transmit their knowledge and of the learning processes of the people group.

Nevertheless, as a theory of learning, situated cognition is not without its critics, most notably Cornford (1999), who looks at a number of different critics of the theory and whilst being critical of the theory himself his conclusions are not entirely negative. He concludes that: 'By focusing beyond the school years to adult life and work, the arguments may serve the valuable purpose of ...focusing upon the development of effective policies to make lifelong learning a reality' (p. 9). More importantly he says in the introduction that although he is concerned at the way what he terms 'educational fads' have been uncritically adopted, he does admit that 'this is not to deny that there may be value in paying greater attention to the social context' (p. 1). His concluding sentence returns to this theme when he states 'Even if empirical research is only directed to disproof of many of the situated cognition claims, a richer understanding of the importance of the social context in teaching and learning is likely to result' (p. 9).

One problem, however, which may arise is in studying how beliefs and more specifically, Christian, religious beliefs are transmitted, lies with ideas such as

'participants will create their own knowledge out of the raw materials of experience, i.e., the relationships with other participants, the activities, the environmental cues, and the social organization that the community develops and maintains' (Stein 1998: 2).

This seems to be at variance with the beliefs of the community being researched, i.e. a faith community believing in what Wright (2000) describes as the Trinitarian God. As such the basic approach to the teaching of their faith is confessional. Confessional religious education, as taught within a faith community, claims to be concerned with what Wright (p. 175) calls 'the objective reality' of God the Father, Son and Holy Spirit. He argues that the roots of this 'Trinitarian spirituality' lie not in human experience but in divine revelation. Such a starting point would exclude the possibility of 'knowledge' being created by the community.

Cooling (2000:159) in his explanation of the Stapleford Religious Education project, which although non-confessional nevertheless explains: 'In the Project the position taken is doctrine defines the nature of Christianity and should therefore provide the fundamental framework within which to set the teaching of Christian texts and practices'. A similar problem arises, particularly in this research, when the nature of traditional beliefs of Ngaju Dayak people are considered. Their traditional beliefs are closely bound up with their *hadat*, a rich word encompassing the idea of traditional law and yet much richer. This *hadat* has been passed down from the ancestors and as such is not to be created by the community.

It may, however, be possible to resolve this apparent difficulty by looking again at the nature of belief. Whilst it may be said that certain *knowledge* itself is revealed and therefore to be imparted rather than to be discovered, a distinction can be made between this revealed knowledge and the *meaning* and *interpretation* of that knowledge, which still needs to be discovered or interpreted within a group/community context. Within this framework a theory of situated cognition can still prove to be a valuable approach to understanding how that knowledge is understood in practice, in the particular situation and culture. Grimmit and Read (1977:7-8) made the distinction in Religious Education between 'learning from' religion and 'learning about' religion. The 'learning about' is concerned, primarily with the given, revealed religion. The 'learning from' is the understanding or application within the particular culture and context.

A prominent aspect of Ngaju Dayak culture is the telling of folk-tales. Interestingly Cooling in describing his Religious Education project also comments that 'the primary purpose of encountering Christian story is to encourage the reader or hearer to reflect on their own way of understanding the world in the light of that being expressed by the writer' (Cooling 2000: 161). Basing his ideas on those of Hull (1991) Cooling (2000: 162) explains that: 'The Project embraces the idea that it is through exploratory conversation that children develop and expand their own religious ideas and vocabulary'

It is also interesting to note that whilst Christianity is not part of Ngaju Dayak original traditional beliefs, as they only converted to it during the late nineteenth and early twentieth centuries, the Kaharingan religion is also a 'given' religion, meaning that it was given by the gods to the ancestors and must be handed down to each succeeding generation. Thus it would be expected that within Kaharingan there would be a far greater emphasis on the 'learning about' rather than the 'learning from', although even here the negative consequences that are believed to follow from any deviation from the 'hadat' ceremonies, handed down by the ancestors from the gods, cause a certain amount of 'learning from' to take place within Kaharingan also. From the above, the basic learning theories that seemed most likely to inform the research were situated and social cognition learning theories.

Alternative Ways of Knowing and Learning

Although some theory of situated and social cognition seems most likely to inform the research among the Ngaju Dayak women, it has been acknowledged those theories emanate from North America and Europe and as such are western theories of learning. A good deal of research claims that there is a great difference between western and non-western people's ways of knowing and the way in which they learn. As mentioned previously, Tweed and Lehman (2002: 89) have shown the totally divergent philosophies of learning that underlie what they have described as 'culturally Chinese' and 'culturally Western' learners. They use a Confucian-Socratic framework to analyze the influence of culture on academic learning. This relates to such attitudes as how far students consider effort to be implicated in successful learning as opposed to innate ability (p. 94), whether or not education is valued for its own sake or for its outcomes (p. 94-95), the value and place of memorisation (p. 93), the degree to which the material or information presented should be evaluated or questioned (p. 90-1, 95) and the amount of self-direction versus guidance from a teacher, that is desired or required in learning (p. 96).

Furthermore, as discussed in the previous section on the definition of knowledge, non-western knowledge or indigenous knowledge is founded upon a very different worldview. Again from an African setting, Le Grange, adapting Ogunniyi's work, has suggested a number of differences in the underlying assumptions between indigenous knowledge systems and what he terms 'Western science' (Le Grange 2007: 585). To note some of the differences, he claims that whereas in indigenous knowledge systems 'events have both natural and unnatural causes' according to western science 'all events have natural causes.' In indigenous knowledge systems 'the universe is orderly, metaphysical, partly predicable and partly unpredictable' while the assumptions underlying western science are that 'the universe is orderly, predictable – that is nature is not capricious.' Indigenous 'knowledge is based on a monistic worldview' but western 'science is based on a dualistic worldview.' These are very basic differences and will need to be taken into account if any meaningful cross-cultural learning is to take place.

The last decade has spawned a large number of interesting studies on indigenous learning which have been carried out within a number of communities across the world. It is important to note here that the Indonesian government has in the past claimed to not have any indigenous people or more accurately the Minister of State for environment informed activists in 1993 that 'Indonesia is a country of indigenous people, run and governed by and for indigenous people' (Koentjaraningrat 1993: 12). He considered therefore, the term

'indigenous' as used in the west, to be inappropriate for Indonesia (Li 2000). The Notes to Republic of Indonesia Act no.39 of 1999, however, concerning human rights clearly refer to 'indigenous rights' (1999: 4). Whatever terminology is used, Indonesia does acknowledge that it has peoples who are isolated or alienated from the majority who are more developed and progressive. These isolated peoples are known as *masyarakat terasing* (alienated/isolated peoples). Much of the literature on indigenous peoples in other parts of the world is very relevant to Indonesia's *masyarakat terasing*.

A considerable body of research about indigenous people has emanated from Canada and particularly from Alaska. One such study investigated a very similar topic to the one undertaken in this research. A survey was carried out in 1997 among the residents of two villages in the south west area of rural Alaska, to learn how families passed on cultural knowledge and skills. McLean (1997: 16) contends that 'the methodologies of teaching employed by Alaska Native parents to teach their children important survival skills and traditional knowledge has important implications for educators and the development of the school curriculum'. Citing Vygotsky, and specifically his Zone of Proximal Development, as her theoretical basis, she concludes: 'The results of this study indicated that the parents exposed the child to skills at an early age, modelled skills, and encouraged the child to watch them' (1997: 20). McLean's concern was to relate her findings to the school curriculum.

Also concerned with the school setting and the place of indigenous knowledge, Hill and Freeman (1998:1) explored 'the phenomenon of adult Indigenous women enrolled in a Canadian teacher education programme, and their roles in supporting and furthering Indigenous culture through the medium of teacher education'. Their evidence further supported the fact that the women played the most important role in the transmission of knowledge to the next generation. They wrote:

Whilst the extended family was fully involved in raising Indigenous children, Indigenous women played the most significant role of anyone in the community. This was so because until puberty the children spent the majority of their time among the women. They were included in all activities of the women including planting, harvesting, gathering, counselling, healing, and so on. In this way the children's learning came through observation. As they became confident in their knowledge, they would begin a system of trial and error, refining their skills as they learned, with guidance and direction provided by the adults (1998: 3).

Another study undertaken among the people of Sub arctic Canada is also of interest in that it specifically looks at the transmission of indigenous knowledge among the women of the area. Ohmagari and Berkes (1997) looked at the transmission of 93 items of women's indigenous knowledge and bush skills in two Cree Indian communities in Canada. They identified 93 items that were being transmitted and asked each interviewee three questions about the item: (1) Did you learn the particular skill? (2) If yes, who was your major teacher? (3) How old were you when you learned the skill? The first two of the three questions above were also asked of the Ngaju Dayak women. Ohmagari and Berkes concluded: 'about half of all bush skills were still being transmitted at the "hands-on" learning stage' (1997: 197). Some skills were being transmitted well but they found that those skills no longer essential for livelihoods, were generally not. The focus of this Cree study was on the importance of indigenous

knowledge 'not only for its own sake but also for its potential to help design more effective management for various ecological systems' (1997: 98).

Also coming from an Alaska setting, Barnhardt and Kawagley (2005) in their paper on 'Indigenous Knowledge Systems and Alaska Native Ways of Knowing', begin by recounting the story of how an Alaskan (Inupiaq) Native elder and his brother had been taught by their father to hunt caribou. The process was one of following and watching carefully as their father demonstrated his great knowledge both of the habits of the caribou and how to hunt them. From this Barnhardt and Kawagley, describing the traditional education of indigenous people explain:

Their traditional education processes were carefully constructed around observing natural processes, adapting modes of survival, obtaining sustenance from the plant and animal world, and using materials to make their tools and implements. All of this was made understandable through demonstration and observation accompanied by thoughtful stories in which lessons were embedded (Cajete 2000 cited by Barnhardt and Kawagley 2005: 10)

Another example of research comes from the African context where important differences can be seen in the characteristics of traditional African education and those of western science based education. Omolewa (2007: 596) explains that:

Traditional African education is usually generated within the communities. It is based on practical common sense, on teachings and experience and it is holistic – it cannot be compartmentalised and cannot be separated from the people who are involved in it because essentially, it is a way of life.

Lessons are learned in the everyday situations, on the streets, in the homes as children watch their parents and listen to their conversations.

Much of the literature examined looks at the issues of how skills are transmitted by indigenous peoples. These studies have often been carried out with the aim of integrating indigenous knowledge into a Eurocentric or western education system or at least learning from the local community in order to apply some of the principles within the formal education set up. Less would seem to have been studied about how beliefs and values are passed on although these do get mentioned from time to time. Furthermore whilst many studies have been carried out among different indigenous peoples, and many anthropological studies exist concerning the Ngaju Dayak people, very little work has been done on the traditional learning patterns of the Ngaju Dayak. Three studies however, warrant mention. A study was carried out in 1993 under the auspices of the Indonesian Department of Education and Culture, which was entitled *Pembinaan Budaya Dalam Lingkungan Keluarga* (Developing Culture within the Family) (Usop 1993). This studied family values within three families in Central Kalimantan. One significant conclusion was that '*budaya lisan dan langsung dianggap lebih efektif dibandingkan dengan media-media lain*' (1993:68) 'oral and direct methods are considered [by the families studied] more effective than other media.' (My translation). A similar study was undertaken by Rampai (1996) which stressed the importance of the family in the development of human resources in Central Kalimantan. This was the study from which the values of the Ngaju Dayak people were taken and were used to inform the values section of this research. A more substantial study was carried out by Garang (1999) into the way children from a different Dayak sub-group of Ngaju people were informally educated. He

studied five Dayak families in West Kalimantan. His English translation of his doctoral thesis title was, 'Educational Pattern of the Dayak community in Transformation to Globalization Era'. He concluded, among other things, that the fathers' role in the five families that he studied, was more dominant in the education of the children and communication was predominantly from the parents to the children (p.163). These insights helped to inform the research undertaken for this thesis as did many of the aforementioned anthropological studies. In addition the literature pertaining to pregnancy and childbirth beliefs, death and burial rituals and beliefs about spirits and the spirit world, among the Ngaju Dayak, other Dayak peoples and surrounding ethnic groups, informed my research. Some of this is briefly considered below.

Traditional Beliefs

Pregnancy and Childbirth

Across the rural areas of both Malaysia and Indonesia, many traditional beliefs and practices continue to be practised. A study of the rural Malay, Indian and Chinese peoples of South Malaysia undertaken from 1997 – 1999 revealed forty six different *pantang* or prohibitions practised by the Indian and Malay pregnant women, including not sitting in doorways and not killing animals (Ali and Howden-Chapman, 2007). Thompson writing about the Dayak people particularly in West Kalimantan reveals:

There are multitudes of taboos for pregnant and newly-delivered women, many of which run contrary to modern medical science and nutrition (such as discarding the colostrum, avoiding eggs) ...The supposed consequences of breaking a taboo can be serious. For example, when a woman died in labour it was diagnosed that the husband broke a taboo while she was pregnant (Thomson 2000: 111-112).

Thompson also cites a number of other such taboos connected with pregnancy concerned with both activities and food.

Death and Burial Rituals

The traditional death and burial rituals of the Ngaju Dayak people have been documented by a number of people but most thoroughly in recent times by Schiller (1997), particularly with regard to the 'tiwah' ceremony, when many years after death the corpse is exhumed and re interred with elaborate ceremonies in order to assure its entrance to its final resting place. She briefly mentions primary interment and explains how:

From the moment shortly after breathing ceases to interment, one relative, usually the spouse or child of the deceased, takes on a task known as *manunggu hantu*, whereby he or she is required to be in the corpse's vicinity at all times, sharing in its discomfort by sitting upright and abstaining from eating rice

(Schiller 1997: 37).

She also reports how 'even after death souls are said to stay in contact with the living' (1997: 37) often through dreams. Birim's (1938: 155) earlier work, translated by Klokke, explained, 'in the religion of the Dayak it is told: all spirits (souls), all belongings in this world can be taken to the upperworld, to the village of souls (*lewu liau*).' The traditional understanding concerning the final resting place of the dead is of a place that is very similar to the earthly village. 'The village of the dead differs from those on the "river of the world" only in that it is bigger, richer, and more splendid' (Scharer 1963: 142). Clearly there are houses and roads there and many similarities with this world.

Spirits and the Spirit World

In the world of the Dayak people in general, anything inexplicable such as illness or misfortune, failure or natural disaster, was accounted for traditionally by belief in the spirits. Many illnesses and disasters are understood as being the consequence of offending a spirit. Therefore many 'prophylactic safety precautions' (Thompson 2000:109) are undertaken to ward off such dangers:

Most amulets and talismans serve as prophylactics, warding off bad luck and the presence of harmful spirits. Many households have small bundles of grass and leaves over their door and hanging from the rafters to ward off spirits. Charms are made from stones, seeds, and other objects that have been 'blessed' and worn on the body or stored in the house (p. 110)

Jay (1993) describes the roles of the two different types of spirit medium in Central Kalimantan, the *tukang sangiang* and the *basir*. She also makes reference to many other spirits which are part of traditional Ngaju Dayak religious belief.

These are but a selection of the writings about the beliefs and practices of the people of the region, many of which are being passed on to the next generation.

Culture and Cultural Transmission

Although I have chosen to discuss indigenous or traditional ways of knowing, and how skills, beliefs and values are being passed on, rather than specifically using the terms culture and cultural transmission, a brief discussion of these underlying concepts would seem to be necessary. Definitions of culture abound and are partly dependent on the context in which they are being used. Those put forward by people involved in indigenous education resonate loudly with the way in which the term is understood in this research. In a paper on culture and the curriculum in the South Pacific, Thaman (1993: 249) defines culture as, 'the way of life of a discrete group of people, including its body of accumulated knowledge and understandings, skills, beliefs and values'. Whilst this is adequate, the concepts are unpacked rather more in a definition given by McLean (1997:16) in her paper on Alaska

native perceptions of cultural transmission. She begins by quoting Maehr and Stallings (1975) stating:

Cultural and traditional knowledge refers to the system of shared experiences by a group of people. The ways people meet their needs, carry out their daily rituals, and organize and express themselves make up their culture and patterns emerge through a dynamic, interactive process involving belief systems, past and present needs and interests, and future dreams.

While this is a more comprehensive working definition, there is however, a danger to which Lingenfelter (1992) draws attention, where culture is viewed as a unity, whereas he and others would maintain that it is more accurate to consider the “duality of culture” (1992: 204). He distinguishes between the idea of ‘cultural system’ and ‘sociocultural system’. The former is ‘the symbols and beliefs that are fundamental to members of a society’ (p. 205). This he sees as the same as “worldview” which ‘provides the theories and beliefs upon which people attempt to order their lives and explain their relationships with others’ (p. 205). The sociocultural system ‘grows from distinctive social environments, producing values and behaviors that may be contradictory to beliefs held in one’s “worldview”’ (p. 205). This distinction between cultural systems and social environments enables contradictions to be more readily understood. People often act in accordance with the values of their social environment while at the same time contradicting their own beliefs or worldview. This also enables change, adaptation and variation in succeeding generations to be more clearly understood.

Understanding exactly how culture is transmitted is a matter of much debate. Theories of cultural transmission abound in both the natural and social sciences. In 1976 Dawkins put forth his theory of cultural replicators which he called ‘memes...a noun that conveys the idea of a unit of cultural transmission, or a unit of *imitation*’ (Dawkins 2006: 192), seeing them as being analogous in the field of cultural evolution with genes in genetic evolution. Durham (1990: 187) describes evolutionary culture theory (ECT) as, ‘a collection of arguments seeking to explain the “descent with modification” of human cultures’. In the writings of Becker (1964) and Bourdieu (1983), concepts of cultural capital are expounded, where aspects of culture are seen as analogous with commodities which can be traded and exchanged. The majority of these theories come from the domain of natural science rather than from social science. A more helpful way of viewing culture for this study comes from Bloch (2005).

According to Bloch (2005), two clear strands of cultural transmission theory can be traced which can basically be divided into the 'diffusionist/evolutionist dichotomy' (2005:15). He begins by outlining what he terms the 'heyday of anthropology's popular success' (2005:6) when unilineal evolutionists theories held sway, tracing it through to what he claims to be the destruction of evolutionist anthropology by theories of diffusionism. He explains that he is using the word 'diffusionism' rather more broadly than usual, to include 'such trends as Geertzian culturalism and postmodernism' (2005: 7), which he claims are based on the same foundation. He continues; 'The basic point of diffusionism – the basic objection to evolutionist anthropology - is that human culture does not proceed along a predetermined line, following a limited number of ordered stages.' (2005: 7). Bloch's answer to this dilemma is 'functionalism' which he defines as:

above all, a commitment to seeing culture as existing in the process of actual people's lives, in specific places, as part of the wider ecological process of life, rather than as a disembodied system of traits, beliefs, symbols, representations, etc (Bloch 2005: 16).

In this thesis culture is studied as it exists in 'actual people's lives' and in specific places. The methodology, as explained in the next chapter, is deliberately qualitative and draws heavily on ethnographic methods to study the everyday lives of Ngaju Dayak people.

The main discussion of cultural transmission theory as it impinges on this study, revolves around whether a theory of transmission of culture is permissible and sound enough to explain what is happening within the lives of the people and the society, and whether it takes sufficient note of the process of transformation. The assumption is that cultural transmission per se, implies a passing on of culture without change, from one generation to the next. However, culture is not static and the Ngaju Dayak culture is no exception as clearly evidenced by the relatively recent transformation of the traditional religion (Baier 2007) and Schiller's (1997) work on secondary mortuary rituals. Is a theory of cultural transmission, therefore, sufficiently robust to deal with these transformations? This and other questions regarding transmission theory are adequately dealt with by Dekker (2001). In his paper on 'Cultural Transmission and Inter-generational Interaction' he defends the theory of cultural transmission, maintaining that it is not a question of either transmission or transformation, and he develops a model 'based on an idea of culture that contains both, transmission and change or transformation...For cultural transmission is considered as a necessary process in the initiation of children into their culture' (Dekker, 2001: 89). He concludes that for both the adherents of human capital theory and mainstream psychology 'cultural transmission is

considered as necessary; moreover, aspects of reciprocity and capacity to change have a secure place in their idea of cultural transmission' (p. 89). The existence and relevance of such a theory of cultural transmission underpinning the research into how skills, beliefs and values are passed from one generation to another among the Ngaju Dayak people, will therefore be assumed. However, just why and how certain skills, beliefs and values are passed on and others are not will be discussed in chapters 8 and 9 in the light of the data. In the article by McLean (1997:16) referred to earlier, she states 'The social actions of participants in a culture indicate what is relevant to the culture, what is stable, what is changing, and parents play a key role in transmitting this knowledge to children'. Her research, which sought to establish how the parents transmitted their subsistence skills to their children, had many similarities to the research undertaken in this study. In McLean's work the relevance of the skill was identified as an important factor.

Although a great deal of anthropological research has been carried out among the Ngaju Dayak people of Central Kalimantan, some of which has been referred to above and in the introductory chapter, rarely has anyone looked at the question from an educational point of view asking how teaching and learning take place traditionally, nor have they applied the findings to the informal or semi-formal religious education sector, which is the goal of this particular study. Therefore the central research question of this study was framed as: 'How do Ngaju Dayak Christian women in three rural communities in Central Kalimantan, pass on their skills, beliefs and values to the next generation?' In order to answer this question three sets of three supplementary research questions were framed. They were:

1. What skills do these particular Ngaju Dayak Christian women possess?
2. How are they passing on these skills to the next generation?
3. Which skills are/are not being passed on and why/why not?

4. What beliefs do these particular Ngaju Dayak Christian women possess?
5. How are they passing on these beliefs to the next generation?
6. Which beliefs are/are not being passed on and why/why not?

7. What values do these particular Ngaju Dayak Christian women possess?
8. How are they passing on these values to the next generation?
9. Which values are/are not being passed on and why/why not?

The available literature will therefore inform the study but it is hoped that new ground will be broken in the specific area of educational research among the Ngaju Dayak people and its implications for informal religious education within the Protestant Church of Kalimantan.

Chapter 4

METHODOLOGY AND RESEARCH DESIGN

The Design

This chapter sets out the overall design of the research, which sought to address the central research question of: 'How do Ngaju Dayak Christian women in three rural communities in Central Kalimantan, pass on their skills, beliefs and values to the next generation?'. It also considers lessons learned from the pilot study, data collection methods used, the ethical issues raised, and how the analysis was carried out including issues of credibility, reliability and generalisation.

Doing research cross-culturally challenges the researcher to look carefully at many pre-conceived and accepted ideas. The choice of methodology is clearly of great importance if it is to facilitate the collection of accurate and useable data. Not all methodologies are appropriate in such a situation. The use of survey methods for example, with people for whom writing is not the norm will necessitate a great deal of explanation on the researcher's part. Also Indonesian respondents, out of a keen sense of politeness, will often give the answer they think the questioner wants to hear, compounding the problem further. By contrast 'Learning by observation and imitation are strategies found around the world' (Ligenfelter and Ligenfelter 2003:36). Given that the aim of this research was to learn about the ways of teaching and learning among the Ngaju Dayak women, considerable time needed to be spent trying to observe and understand their way of life. For this research I was able to spend time over a period of two years, living among the Ngaju Dayak people, observing their way of life and learning from them. It was therefore appropriate that observation together with ethnographic interviews were the key methodologies employed.

An ethnographic case study method was therefore selected as the most appropriate methodology, giving the opportunity for in-depth study of a particular instance of the phenomena or behaviour to be researched. Participant observation enabled me as the researcher to be as much an insider as is possible for a white, British, woman in a Ngaju Dayak village, and to observe in detail the patterns that emerged. Ethnographic interviews enabled me to ask the questions raised by the observations, fill in the details and discover how the women themselves perceived the situation.

The basic design of the research is an educational, ethnographic, collective case-study which is both descriptive and interpretive. It involves:

participating, overtly or covertly, in people's daily lives for an extended period of time, watching what happens, listening to what is said, asking questions – in fact, collecting whatever data are available to throw light on the issues that are the focus of the research (Hammersley and Atkinson 1995:1).

It is not a traditional study of education undertaken in a school or a similar educational institution, but it is concerned primarily with the processes of learning and teaching. Passing on, in some way, skills, beliefs and values is at the heart of this research. Because the primary reason for undertaking the research was to discover from these Ngaju Dayak women themselves how they traditionally teach and learn and to seek to understand this from their perspective within the context of their distinctive worldview, the anthropological roots of ethnography were deemed to be particularly appropriate.

Combining the two aspects of education and ethnography, LeCompte and Preissle (1993: 28) claim that:

Educational ethnographers examine the process of teaching and learning, the intended and unintended consequences of observed interaction patterns, and the relationships among such educational actors as parents, teachers, and learners and the socio cultural contexts within which nurturing, teaching, and learning occur.

The case-study approach has been adopted but, in order to have a more representative picture of Ngaju Dayak life, three villages were selected for study rather than a single one and a number of women and/or families in each village participated in the research. It would have been possible to carry out the research in just one Ngaju Dayak village over the approximately forty weeks set aside for observation and data collection. The disadvantages of this, however, began to emerge when considering the close kinship ties in any one Dayak village. Inter-marriage is the norm and cousin marriages are favoured by many, although some do not allow first-cousins to marry. Nevertheless, most people in any one village will probably be related to one another in some way. Thus it could be that the families used in the sample could be closely related and therefore could be expected to have been exposed to some similar influences in their backgrounds.

Secondly, because of the relative insularity of each village until very recently, caused by the geography – preponderance of rivers, lack of roads, limited mains electricity, often no telephones etc.- there can be quite a degree of variation between the way customs and culture are interpreted and celebrated in villages from one river to another. It was therefore decided to select three different Ngaju villages on three different rivers, in order to seek to establish how high the degree of uniformity is, across the area, in terms of the ways in which skills, beliefs and values are transferred. In spite of the variations mentioned above it was

considered that the three villages had sufficient in common to allow for them to be viewed as a collective case.

To some extent the study is descriptive, seeking to describe the observed phenomena. However, the research also seeks to learn from the procedures and processes observed what may be transferable to other contexts and is, to that extent, interpretive.

The Pilot Study

As the analysis of the data ran concurrently with the data collection they will be discussed together in relation to the pilot study. The pilot study was carried out over a ten week period from April to mid June 2007 in Fresh Springs village (a pseudonym). The aim was to discover and field test the most effective means of data collection and analysis suitable both to the nature and context of the study and to give answers to the central research question, which at this stage was in the form of, "How do Ngaju Dayak Christian mothers and grandmothers pass on their knowledge, skills, beliefs and values to their children and grandchildren.'

Spradley's Developmental Research Sequence (DRS) (Spradley, 1979, 1980) using ethnographic observation and ethnographic interviews was initially selected as the main method for data collection and analysis as this seemed to be a well thought out and tried and tested method of doing ethnography, giving breadth and flexibility in the collection of data and yet being sufficiently rigorous in its analysis.

Spradley (1979: 60), identifies more than thirty different types of ethnographic question. He divides them into three main types, descriptive questions, structural questions and contrast questions, before further describing the different sub-categories of questions which would be included in each of these three areas of questioning. Descriptive questions are the most straightforward and were used among other things, to obtain information about what skills the women possess, for example by asking: 'Can you describe for me a typical day for you here in the village?' Descriptive questions were also used to enquire about beliefs and values. Structural questions were asked, that is questions which helped me as the researcher understand the way knowledge is organized in the target culture. An example of such a question might be something like: 'Can you explain to me all the processes you go through in order to produce rice, from finding the land to grow it to having it ready to cook?' Contrast questions were used to discover what is meant by certain aspects of the culture, asking about

differences in order to obtain clarification. Such a question may be 'can you tell the differences between a ghost and a spirit?'

In the course of the initial analysis in order to carry out focused observations and interviews, focused structural questions were formulated based on the four knowledge cover terms which had emerged from the original domain analysis. In the knowledge domain the questions followed what Spradley terms the strict inclusion (X is a form of Y) semantic relationship format, for example, 'What are all the different kinds of medicinal plants known to the Ngaju Dayak people?' In the skills domain both the strict inclusion and the means-end (X is a way to Y) forms were used. An example of the latter might be, 'What are all the different ways Ngaju Dayak people catch fish?'

When considering the skills questions, however, it was realised that in practice these were a repeat of the knowledge domain questions. On reflection this was not surprising because, as stated in chapter 3, 'knowledge' as an end in itself, is quite foreign to the Asian mind in general and to traditional Ngaju Dayak thinking in particular. On examining the questions and the answers given to the knowledge domain questions, it was realised that nearly all of the knowledge possessed by the Ngaju Dayak people is practical knowledge and the putting into practice of that knowledge is in fact a skill. Hence the duplication in the questions. It was decided therefore, to subsume the knowledge domain under the skills umbrella for the main study.

In view of the breadth of material generated by the open-ended ethnographic interview and because I was concerned that I would not obtain the answers to the questions that concerned me regarding *how* skills, beliefs and values were passed on, and in view of the limited time remaining for the pilot study, the temptation to make use of pre-ordained analytical categories borrowed from social science was yielded to! I decided to carry out a series of structured interviews based on the book *Mari Belajar Budaya* (*Let's Learn Culture*), (Karti Daya 2005) to help obtain the necessary information. Four structured interviews were carried out and the answers analysed in order to find answers to the structured questions.

Whilst this proved useful in learning a great deal about local beliefs, its pre-assigned analytical categories inherent in the questions gave the answers to *my* questions and

categories rather than answers emanating from the participants. Therefore the use of these structured interviews was not repeated in the main study.

At another point it was noted that quite a lot of information had been gathered but although it greatly informed the background to an understanding of the skills, beliefs and values of the rural Ngaju Dayak people, and was addressing the question of *what* skills, beliefs and values were being passed on, it was not addressing the question of *how*, and how Ngaju Dayak grandmothers and mothers in particular, transmit their skills beliefs and values to their children and grand-children.

One way of concentrating on the grandmothers was to use Wengraf's (2001) Biographical Narrative Interview Method (BNIM), which seemed to be an excellent way of eliciting the life-stories of grandmothers and thereby discovering what was important to them, how they had learnt it and how they were passing it on to the next generation. The method, however, demands a very specific formula for framing the initial research interview, which has to be followed exactly. This was translated into the local and the national languages and a 'Practice Interview' was carried out on 18th May 2007, in the city where I was living, with the grandmother of a friend. This did not prove to be easy and a lot of encouragement was needed to get her to speak. The method demands that the informant tell their own story in whatever order they wish, beginning where they like. However, this woman didn't seem to know where to begin. Eventually a brief interview was recorded and the second stage of the process involving asking more specific questions from points raised in the interview was carried out. It was then transcribed.

Returning to Fresh Springs village on 19th May 2007, to continue the pilot study, I sought out willing grandmothers to interview. However, the method seemed too formal and intimidating for the grandmothers I approached, even though they knew me quite well by this time and had proved very ready to 'chat' informally about things in general. After the third polite refusal I decided to abandon this particular method, realising that it was not suitable for my participants.

Whilst I had sought to explain clearly what I was asking for and assure them that nothing would go into print which they had not seen, heard and approved of, there was still resistance to this approach. Further discussion with colleagues suggested that Ngaju Dayak people in

the villages are very suspicious of 'research' and fear that anything they say will incriminate them in some way. This may be so or it may be that, as they said when asked, they really believe that they can't tell stories – even their own. This is clearly not the case but when asked to talk about their lives they immediately perceive themselves as unable to do so, whereas in general conversation they are often quite ready to share their stories. This raised ethical issues and great care had to be taken to ensure that what they passed on informally they were happy to have recorded, if I chose to use it. I sought to ensure that this was so and have referred to it in my ethics section in this chapter.

Nevertheless, the outcome at this stage of the pilot study was to abandon the BNIM and to revert to Spradley's Developmental Research Sequence (DRS) but this time seeking to direct the focus towards grandmothers rather than their skills, beliefs and values, important though these were.

Of the various data collection instruments that were tried in the pilot study, it was concluded that Spradley's DRS provided one means of collecting and analysing data on Ngaju Dayak grandmothers and allowed questions, which seek to inform and answer the central research question, to be adequately addressed. The complete process was not field-tested due to time restraints. However, the major weakness that emerged was the volume and diversity of the data that this method produced. Had the aim of the research been to produce a 'pure' ethnography of these women it would have been a useful and productive tool. But as the aim was to discover how Ngaju Dayak women in three villages pass on their skills beliefs and values to the next generation in order to understand better their traditional ways of learning and teaching, the DRS method was not continued in the main study. Many insights into data collection were gained, particularly in informing the ethnographic interview questions, but the method of analysis was not pursued. Instead a content analysis was carried out on the combined observation and interview data, which is explained in more detail below.

The large amount of data generated from just the pilot showed that in the three main target villages the amount of data collected and analysed needed to be limited in some way in order to focus on answering the research questions. Therefore, based on the experience of the pilot study and further observations explained later, it was decided to limit the beliefs and values fields of study.

What had also begun to become apparent in the pilot study but was much more clearly highlighted when data was being gathered in the first 'target' village, was that it was not just the grandmothers, i.e. the women of 40 – 50 years upwards who had had a limited formal education, but also many of the younger girls had dropped out of school before, or on completion of, their lower secondary school education, i.e. after nine years of schooling, and had married whilst still teenagers. It was therefore decided that it would be more appropriate to broaden the research questions to include all adult women and not just grandmothers. The methodology, however, was still considered to be appropriate.

The pilot study was very useful in enabling various methodologies to be tried in a Ngaju Dayak village. The specific data that it yielded was not necessarily transferable to other villages, each Ngaju Dayak village having its own unique setting. Therefore a multiple case-study design using three case studies and generalizing to theory rather than populations, was planned for the main study. However, the broad categories which were generated in the pilot study did serve as pointers to the categories to be considered in subsequent villages. It also enabled suitable amendments to be made to the research question, subsuming the knowledge category into the skills rather than having four discrete domains in the main research question. Thus the original, 'How do Ngaju Dayak Christian mothers and grandmothers pass on their knowledge, skills, beliefs and values to their children and grandchildren', became, 'How do Ngaju Dayak Christian women in three villages in Central Kalimantan, pass on their skills, beliefs and values to the next generation.'

Data Collection

As the basic design is an educational, ethnographic, collective case-study, ethnographic field notes and observations formed the major part of the data collection. The ethnographic field notes consisted of condensed and expanded field notes, fieldwork journals and analysis and interpretation notes (Spradley, 1980: 71-72). There are, however, among researchers, a great variety of ways of understanding these terms (Emerson, Fretz and Shaw 2001). In this study, condensed field notes were the notes I jotted down as I observed life in the village or those which I noted down as I carried out the interviews. They were immediate and as accurate as possible but of necessity not very detailed. Expanded field notes were the more detailed versions of the condensed field notes, written up as soon as possible after the event and at the latest the following day. It was also a policy not to undertake any further observations or interviews until the previous ones had been recorded in the expanded field

notes. Journals were recordings of miscellaneous other events and feelings, questions and wonderings, that constantly came into mind during the data gathering stage.

I was aware that these field notes and journal entries were not detached, objective accounts of what I saw and heard, however much I tried to make them so. They were coloured by who I am and where I was coming from as explained in the opening chapter of this thesis.

Emerson, Fretz and Shaw (2001: 353) point out that field notes are 'a form of *representation*, that is, a way of reducing just-observed events, persons and places to written accounts.' As such, they are 'inevitably *selective*. The ethnographer writes about certain things that seem 'significant', ignoring and hence 'leaving out' other matters that do not seem significant' (p. 353).

The analysis and interpretation of the data, took place back in the town, after two or three weeks of field work, where I had access to a more constant electricity supply and a computer. These were also times for reflection on what I had already discovered and re-assessment of what was needed on return to the village.

As stated above the data was collected using a combination of observations and interviews. The observations were of two types: those I termed descriptive or general observations where I simply tried to observe all that was happening in a given location, and focused observations where I set out to observe more specific events or happenings e.g. a funeral or rice-planting. All of the interviews I have termed informal as they took place where and when the women could talk to me – usually sitting on the floor, with children and other family members around and joining in. I have divided them into three types: informal unstructured, where I was able to ask questions in the course of general conversations; informal semi-structured, where I had an interview guide and focused on a specific topic, plus informal structured interviews, which were used in the first stage of the values section. In these more structured interviews participants were asked to order cards with various values written on them and select and sort photos, taken by myself, of different activities undertaken by Ngaju Dayak women, according to participants opinion of their importance. (For details of the informal semi-structured and informal structured interviews see Appendix 1).

Focused observations and informal semi-structured and structured ethnographic interviews that took place in the villages during my periods of residence there, built on what I had observed during the descriptive or general observations and on areas pursued in the pilot

study, informed by Spradley's Developmental Research Sequence (Spradley, 1979, 1980). The field notes included the records of the periods of both descriptive/general observations and focused observations and transcriptions and translations of the various types of interviews, some of which were electronically recorded where it was considered appropriate.

Observation

Observation was considered to be an effective way of gathering data to begin to answer these questions given that:

behaviour and, thereby, data are socially situated, context related, context dependent and context rich. To understand a situation, researchers need to understand the context because situations affect behaviour and perspectives and *vice versa*; (Cohen, Manion and Morrison 2000: 137).

Observation is an integral tool in this process. Bannister *et al.* (1994: 19) describe some of the characteristics of observation as:

a commitment to try to understand the world better, usually from the standpoint of the individual participants. Thus we are concerned with such aims as getting to understand 'real' people in their everyday situations, to learn about the world from different perspectives, to experience what others experience, to unravel what is taken for granted, to find out about the implicit social rules, etc.

Given that many of these characteristics of observation accord with the aims of this research into Ngaju Dayak women's ways of teaching and learning, observation was selected as one of the main methods of data collection, and whilst not without its weaknesses, it was anticipated that through observation rich and informative data would be collected. I was committed to trying to understand the world of Ngaju Dayak Christian women better, to understanding the 'real' people in their everyday situations, to see and understand the world as they see and understand it. To observe the situation, rather than to impose my agenda on it, was an essential part of the research.

Alder and Alder (1994: 389) describe observation as 'the fundamental base of all research methods.' The gathering of 'live' data from 'live' situations (Cohen, Manion and Morrison 2000: 305) has great attraction for the qualitative researcher, enabling her to look at what is happening while it is happening and where it is happening, rather than having to make use of second hand or pre-digested data from other sources. Natural observation, is, by its nature research done in context – the natural context of the participants, rather than in the laboratory. Bannister *et al.* (1994: 17) talk about 'observing what occurs naturally in the society or environment.' Talking specifically about psychology, they claim that observation is

‘probably the oldest and most basic method used in psychology’. They continue to point out that many major psychological and educational developments have come from initial observations and give as examples some of the most well known educational psychologists - Pavlov, Skinner, Piaget and Freud. Whilst these initial observations were usually followed up by laboratory experiments, the value of the initial observations should not be underestimated.

Observation as a research method can be divided into two main types, systematic or structured observation and naturalistic observation, although the terminology can be confusing, being used to mean different things by different researchers. The term systematic observation as defined by Croll (1986:15) is ‘observational research which involves carefully defined rules for recording and observation and which normally reports the results of such observations in quantitative terms.’ This would seem to be what Cohen, Manion and Morrison (2000) mean by structured observation.

As this research was qualitative it did not use structured or systematic observation as used above. It was more appropriate to use what is often termed naturalistic observation. According to Alder and Alder (1994) ‘qualitative observation occurs in naturalistic settings without using predetermined categories of measurement or response.’ Whilst this research took place in naturalistic settings, Hammersley and Atkinson (1995: 9-10) point out that:

Naturalism proposes that through marginality, in social position and perspective, it is possible to construct an account of the culture under investigation that both understands it from within and captures it as external to, and independent of, the researcher: in other words, as a natural phenomenon. Thus, the *description* of cultures becomes the primary goal.

In that this research is partially descriptive of what occurs naturally in the environment, it could be described in some senses as naturalistic. However, in that it is largely interpretive it does not wholly fit with the naturalistic label either. Further, more recent post-modern criticism of naturalism, or more specifically of the naïve realism that is presupposed by naturalism, would question the possibility of telling it ‘as it is’ (Brewer 2000: 42). Brewer writes:

Ethnographers who imply that their accounts are accurate representations of the social world ‘as it is’, beyond the influence of theoretical presumption or prejudice, are both ignorant of the effect of their values upon research and simplistic in suggesting that there is only one objective description which they have reliably captured.

The answer to this criticism, suggested by Brewer, is reflexivity, whereby the researcher reflects on the ‘social processes that impinge upon and influence the data’ (Brewer 2000:

127), and interprets it accordingly. Hammersley and Atkinson (1995:16) write: 'The concept of reflexivity acknowledges that the orientations of researchers will be shaped by their socio-historical locations, including the values and interests that these locations confer upon them.'

In the light of this to label this particular study as completely naturalistic would demand a degree of detachment that is inconsistent with the proposed methodology and positioning of the researcher within the research. Although perhaps putting myself in danger of being accused of seeking the best of all worlds, I do not totally reject naturalism nor even some aspects of realism but like Hammersley and Atkinson (1995: 17) would argue that:

...recognition of reflexivity implies that there are elements of positivism and naturalism which must be abandoned; but it does not require rejection of all ideas associated with those two lines of thinking. Thus, we do not see reflexivity as undermining researchers' commitment to realism. In our view it only undermines naïve forms of realism...

By including my own role within the research focus, 'and perhaps even systematically exploiting' my participation 'in the settings under study as a researcher,' I can produce accounts of the social world of the Ngaju Dayak people 'and justify them without placing reliance on futile appeals to empiricism, of either positivist or naturalist varieties' (Hammersley and Atkinson 1995: 21-22).

Participant Observation

Having selected what might be described as 'semi-naturalistic' observation as one of the main methods of data collection, the question of what kind of 'semi-naturalistic' observation still needs to be addressed. A variety of methods of observation have been identified and each of these has its own strength and weakness. Gold (1958) identified four different roles a researcher can take from complete participant to complete observer.

The complete participant, where the observer's identity is unknown and he or she interacts with the group, to all intents and purposes as one of them, and where the group does not know that the researcher is observing them, may have the advantage of being the most likely way to get the trust of the group, at least initially, and least likely to affect the actions of the group being studied. In most cases however, it is highly suspect from an ethical stand-point. 'Observing people without their knowledge (and/or recording their comments without their permission) seem to be at best a highly questionable practice' (Frenkel and Wallen 2000:

536). This approach would have been totally unacceptable in my research and totally inappropriate as I was already known in the villages and had worked with the people I was observing. Furthermore the presence of an outsider, let alone a white foreign outsider, will always cause excitement and interest in Dayak villages, so in no way would it be possible or desirable to be there as a 'complete participant' in Gold's sense.

The second stance is that of the participant - observer where the researcher participates fully in the activities of the group being studied but lets it be known that she is doing research. This would seem to be a much stronger position from an ethical view-point. It also has the advantages of the researcher being able to be integrated into the group and to become much more of an insider whilst still making it known that her prime intention is that of research. This was closer to the position that I adopted in the villages, where I lived amongst the people, shared their homes for a few months and was a part of the community.

The third stance of observer- participant, where the researcher identifies herself as a researcher but does not become a member of the group and where 'she would not attempt to participate in the activities of the group other than superficially...She remains an interested observer' (Frenkel and Wallen 2000: 536) has other advantages for the researcher in that more distance can be kept between those being observed and the observer and more time is likely to be available for observation and recording. Nevertheless in my situation this would not have been an easy stance to take given that I already had a role, that of a teacher/spiritual leader, and where participation in the life of the church and of the community was expected.

Both the participant - observer and the observer - participant have the disadvantage that being present in the group will to some extent affect the group, merely by being a member of it. In this setting this will undoubtedly be true and a number of other things will also affect it. The influence of my former role as a 'teacher/spiritual leader', within that culture, probably caused the women to behave differently towards me when I was around, as did being white – in some cases deference still being given to the old colonial white power, over sixty years on from independence.

The complete observer role or 'non participant observer' as Lee-Treweek (2000: 117) describes it where the observer observes but in no way becomes part of the activities even to the extent that participants may or may not realize that they are being observed does have

some advantages. The observer can melt into the background, at least in theory, and be much more focused on the observation task. However, there are also distinct disadvantages in this stance as Lee-Treweek found in her research into the work of auxiliaries in an Old People's Home. In her chapter entitled 'The Insight of Emotional Danger' she describes her role as that of a non participant observer but in practice she found the role to be a very difficult one. Being in the situation but having no authority to intervene or even help, and having no right to do so caused her a great deal of stress. Also her position as an outsider was quite suspect as far as her colleagues were concerned, making normal relationships very difficult to maintain. She writes:

from the auxiliaries' perspective my role must have appeared decidedly ambiguous; I was in and around the home on a regular basis watching what went on, I interacted with the workers but I did not appear to do anything and had no firm role. I must have seemed shadow-like, transparent and perhaps even lazy as I followed people about whilst they worked (Lee-Treweek 2000: 120).

It would seem that even when this role is possible it can have grave drawbacks from a practical, emotional and ethical standpoint.

The examples cited give weight to Cohen, Manion and Morrison's (2000: 311) claim that: 'Both complete participation and complete detachment are as limiting as each other.' They explain that the complete participant dares not go outside of the group for fear of revealing her identity and the complete observer has no contact with the observed so makes inferences, which can be at best inaccurate and at worst completely wrong. In defence of the complete participant and the complete observer roles, it can be seen that both minimise reactivity or the effect of the researcher on the researched, a problem which I will explore in the next paragraph. The price to be paid, however, is probably generally too high. Given the above and bearing in mind 'fitness for purpose', it seemed to be most appropriate that I took on the role closest to that of the participant-observer although, as an outsider, in many respects, there were some instances when I was more the observer-participant.

Having established my role in the research as a participant observer, there remained a number of other disadvantages, common to any observer role, which needed to be discussed and, where possible, their effects minimised. Firstly, I return to that referred to above, the effects of the researcher on the researched.

The presence of an observer can have a considerable effect on the behaviour of the subjects, and hence on the outcome of a study. Also the data reported (that which the observer records) inevitably to some extent reflect the biases and viewpoints of the observer. (Fraenkel and Wallen 2000: 538).

Fraenkel, and Wallen (2000) explain that there can be two possible effects of the observer's presence on the observed. Firstly, they can arouse curiosity which may lead to lack of attention to the task in hand and to other than normal behaviour. This effect can be greatly minimised if a little care and forethought are taken. As Fraenkel and Warren (2000) suggest it is important to be introduced first and to be around for a while before you begin the 'observation' proper to familiarize the participants with your presence. In the case of this research I was already known to many of them and lived in their villages for a number of weeks, slightly reducing the curiosity effect, although in such situations every action of one's private life was scrutinised and debated. Nevertheless, it is hoped that familiarity minimised this effect and did not lead to any undue loss of attention on the part of the women or to too much abnormal behaviour.

Secondly, not only is it the observer's presence that can effect the behaviour of the observed but also the observer's purpose.

behaviour of those being observed can be influenced by the researchers purpose, i.e. the person/group being observed adapt their behaviour accordingly, thus giving a distorted picture of what normally happens in the situation (Fraenkel and Wallen 2000: 538).

An example of this in the Dayak villages could have occurred when I went to observe the local church women's group. It would be quite conceivable that numbers increased both due to the curiosity factor mentioned earlier and also to promote my purpose, i.e. demonstrate the popularity of the meeting - even more so if any material advantage from attending had been imagined. In the light of this I can sympathise to some extent with the viewpoint of some researchers quoted by Fraenkel and Wallen (2000: 538) that 'the participants in a study should not be informed of the study's purposes until after the data have been collected.' These researchers suggest that,

Instead researchers should meet with participants before the study begins and tell them that they cannot be informed of the purpose of the study since it might affect the outcomes. As soon as data have been collected, however, the researcher should promise to reveal the findings to those who are interested (p. 538).

Convenient though this may be it does raise ethical issues as to how far people can be 'used' and disempowered for the sake of research. Nevertheless, it has to be admitted that it may well be necessary in some instances to couch the purpose in either vague or different terms in order to avoid this effect distorting the research findings. In practice, in this research I was

able to explain quite openly that I was observing the everyday life and beliefs of Ngaju Dayak women. This seemed to be clearly understood and posed no discernable problems.

Thirdly, I revert to the problem of observer bias. The traditional view is expressed here by Fraenkel and Wallen (2000: 539) when they define observer bias as 'the possibility that certain characteristics or ideas of observers may bias what they "see."' They comment:

It is probably true that no matter how hard observers try to be impartial, their observations will possess some degree of bias. No one can be totally objective, as we all are influenced to some degree by our past experiences, which in turn affects how we see the world around us and the people within it. Nevertheless, all researchers should do their best to become aware of, and try to control, their biases.

The extent to which this is seen as a problem has been debated in recent years, particularly in the light of post-modern philosophy and its questioning of assumed scientific objectivity (Angrosiny and Mays de Perez 2003: 109). That researchers should be aware of their biases is not contested but the extent to which they need to *control* them, where control means to eliminate or negate their effect, is hotly debated. 'Ethnographic truth has come to be seen as a thing of many parts, and no one perspective can claim exclusive privilege in the representation thereof' (Angrosiny and Mays de Perez 2003: 110). The idea of ethnographers operating at a distance from their subjects has been revised by many researchers and the idea of the observed being the *subject* is often seen to be inappropriate, replacing it with dialogue between the researchers and those whom they are describing. Angrosiny and Mays de Perez (2003) explain that as a result of this questioning and subsequent shift of ideas, there has been a change too in the place of the ethnographer in the writing of ethnographies. 'Discussions of ethnographers' own interactions, relationships, and emotional states while in the field have, as a result been moved from their traditional discreet place in acknowledgements or forwards, to the centers of the ethnographies themselves' (2003:111). Peshkin also starts from the premise that subjectivity is inevitable and argues that researchers should 'systematically seek out their subjectivity.' He continues 'The purpose of doing so is to enable researchers to be aware of how their subjectivity may be shaping their inquiry and its outcomes' (Peshkin,1988: 17). Numerous other studies with the ethnographer writing her/himself into the study have emerged over the last decade. (e.g. Kiesinger 1998; Bochner 1997; Ellingson 1998; Hones 1998). 'Although they [qualitative researchers] realize (as should all researchers) that one's biases can never be completely eliminated from one's own observations, the important thing is to reflect on how one's own attitudes may influence what one perceives' (Frenkel and Wallen 2000 :359). I have sought to reflect on these issues at some depth and have written myself into this study, as recorded

in the opening chapter, in order to take account of my own biases. Whilst these biases have undoubtedly coloured my perceptions, I believe that rather than invalidating or undermining the findings they have strengthened them.

There are advantages and disadvantages in using observation as a method for collecting data in a qualitative research project. Whilst it has to be acknowledged that there are problems of objectivity and credibility, which will be discussed below, it can nonetheless be seen that given sufficient consideration these difficulties can be minimised. It should also be acknowledged that in spite of the difficulties the rewards of conducting observational research are indeed great. It gives a picture of real life in at least a semi-naturalistic setting, gives a wealth of information about what is going on, who is involved and when and where things happen. It can begin to examine causality, giving valuable insights into why things happen or why they are as they are. It can also lead to other questions and be combined with other methods of data collection to give a rich description of the situation being observed. Much data can be, and indeed was produced, which can be both an advantage and a disadvantage in that problems of selectivity had to be addressed. Analysis of data can also be very difficult and time-consuming. Nevertheless in spite of the difficulties it is probably not an overstatement to say 'observation is the most penetrating of strategies, the most close and telling mode of gathering information.' (Lofland 1971:93) and I believe that the observation I have undertaken among Ngaju Dayak women has produced 'rich and exciting results, which may well help to challenge existing assumptions about social life, experience and rules and point the way to new developments' (Banister *et al.* 1994: 32).

Ethnographic interviews

The second major tool that was used for this research was the ethnographic interview. According to Fetterman (1998:37) 'The interview is the ethnographer's most important data gathering technique. Interviews explain and put into a larger context what the ethnographer sees and experiences'. Due importance therefore needed to be given to the ethnographic interview as a methodology, even when used in a study which was not pure ethnography. Given its importance it is necessary to define more clearly what is meant by an ethnographic interview. 'It is best to think of ethnographic interviews as a series of friendly conversations into which the researcher slowly introduces new elements to assist participants to respond as participants' (Spradley 1979: 58). The aim of the conversation is to get the participants to talk about the particular situation as they see and perceive it, from the inside.

The selection of participants is crucial to the quality of the information received. 'Key Informants are individuals who possess special knowledge, status, or communicative skills and who are willing to share that knowledge and skill with the researcher' (Zelditch 1962: 166). The interviewer's skill is needed firstly to select individuals who possess this sort of knowledge and then to encourage them through skilful questioning to share that knowledge with the interviewer. LeCompte and Preissle (1993: 166) also alert the researcher to the necessity of ensuring that overall the participants are representative of the community. This I sought to achieve by clearly setting out my criteria before requesting help to find suitable participants.

The full schedule of the interview question topics is included in Appendix 1. The questions in the skills area were questions relating to the daily life of the people and had emerged as a result of the observations. Analysis of the observations enabled me to create a fairly comprehensive taxonomy of the skills of Ngaju Dayak people. These were grouped together and questions were asked relating to the different skill areas. For example, as I watched the women go through their daily work I was prompted to ask them to tell me about all of the tasks they undertook in a typical day. After accompanying them rice planting, I asked questions regarding the process I had observed. Communication skills, which included story telling, reading and writing and a category I labelled 'church related skills' were included in the study as these were an integral part of the lives of some of the Christian women, and were important to some of them. Observations also helped to inform the beliefs questions as I observed different ceremonies taking place and rituals being carried out.

The field of 'beliefs' is a vast one and it would not have been possible or appropriate to attempt to make a comprehensive study of all Ngaju Dayak beliefs in this particular research where the emphasis is on how and why beliefs are passed on rather than the nature of the beliefs themselves. Ngaju Dayak legal, religious and customary beliefs are documented in other places (see Rampai 1996; Schiller 1997; Thomson 2000).

Based on the literature and the initial observations, I decided to concentrate on four key areas where current belief could be seen to be affective, impacting on behaviour and so able to be observed, rather than on doctrinal beliefs where it is very difficult to assess how far these are truly held beliefs or merely ones to which intellectual assent is given. Beliefs surrounding the following four key life events and concerns were therefore selected as they clearly impact on

the behaviour and life-style of Ngaju Dayak Christian women and the outcome of these particular beliefs can be observed in resultant behaviour. They were:

- Pregnancy and birth
- Death, burial and the after-life
- Spirits, omens and other supernatural phenomena
- Ensuring subsistence

These particular events represent areas of major concern for the Ngaju Dayak people, given their worldview, limited modern medical facilities and subsistence farming life-style.

Ethnographic interviews were then developed using various kinds of ethnographic type questions. The questions began with survey or what Spradley (1979) terms grand tour questions. These were followed with more specific questions. Whilst the approach was informal, as stated above, the questions were semi-structured in order to cover the same topics and aspects with each of the women interviewed in all three of the villages.

Questions relating to the values of the people also emerged partly as a result of the observations. However, these were also informed by the literature and questions in the informal structured interviews were limited to the following specific areas based on a report published by the Indonesian government, edited by Rampai in 1996 entitled, *Fungsi Keluarga Dalam Meningkatkan Kualitas Sumber Daya Di Kalimantan (The Function of the Family in Improving the Quality of Human Resources in Kalimantan)*. These researchers identified the following values as those held by the Ngaju Dayak people of Central Kalimantan. They were:

Positive values: (Presumably in random order)

- Discipline, honesty, politeness, obedience, responsibility, independence, harmony.

Negative values: (Presumably in random order)

- Disobedience to parents, laziness, lying, stealing, fighting.

I wished to explore further the validity of these values in 2007/8, the two years in which I was conducting the field research, as the original report had been written over ten years earlier. I wanted to try to establish which of these values were continuing to be passed on, and which were the most important values for these particular Ngaju Dayak women. Informal structured interviews were therefore used for the opening questions about values (see Appendix 1).

The informal semi-structured interview questions were approximately as given in Appendix 1, bearing in mind their informal nature and the translation process. It was not thought necessary to repeat questions to which almost identical answers regarding standard

processes had already been given a number of times. In Rainbow Village it was less easy to observe the family life of people other than my host family, as they spent large parts of the day away from the village and when I visited the homes I was treated as a guest rather than being able to be a participant observer. No weddings or funerals were held in the village during the two month period in which I was visiting. Baseline data about the demography of all three villages was collected using a formally structured interview schedule (see Appendix 4).

Given that in this particular culture rarely, if ever, do people do anything on their own, I had been advised by a senior woman member of the church synod not to go to any of the villages by myself. In the event it was found to be highly advantageous to take a native Ngaju Dayak female friend with me whenever possible. This proved to be of particular advantage in the interviewing process, as, whilst all of the people interviewed were virtually bi-lingual, speaking both the national and the local language, it became apparent that many were much 'freer' when using the local language. As the main researcher, although fluent in the national language my knowledge of the local language was limited. It therefore proved invaluable to have a translator to assist in the translation of both the interview questions and answers. My assistant, Nova, joined me for a month in One Ox village, the first of the target villages used in the main study and also assisted with the transcriptions from the original Ngaju Dayak voice recordings. She also assisted throughout the data collection phase in the third of the three villages, Rainbow, as this was her home village. In the other village I was assisted mainly by Dolly, a local school teacher with whom I shared a room in the village home of the local Christian minister and her family. Both assistants had been educated at universities in the provincial capital, the first to the Indonesian bachelor degree level in Christian Education, the other to Diploma level in Primary School teaching. The use of Ngaju Dayak assistants did however raise further ethical issues which are discussed in the ethics section below.

Ethical Issues in Observation and Interviewing

Many of the ethical issues have been covered in the explanation in chapter 1 of how I see myself in relation to the research. Nevertheless, in view of the importance of ethical issues particularly in this research, a discussion of the ethical problems that might be encountered cannot be omitted. The first of these are concerned with questions of access. As a researcher in Indonesia, I had to have permission from the Indonesian government, through the Department of Education and Culture to obtain a 'student' visa. This can only be granted

after obtaining letters from an Institute of Higher Education within the country who are willing to partner in the research. This was the denominational Theological Seminary in Banjarmasin, South Kalimantan (*Sekolah Tinggi Teologia, Gereja Kalimantan Evangelis. STT GKE*). Immigration, Police and local government officials in both South Kalimantan, where I officially resided and in Central Kalimantan where I stayed when involved in the data collection, all had to be informed of my presence and give their permission. In each Administrative Area and village where data was collected I needed letters for the local officials in order for them to grant their permission.

Because the Seminary is a denominational one the Church leaders at the level of the synod also had to agree and to give letters of permission. They proved to be very interested in the project and promised whatever help was needed. For each village where data was collected, the local presbytery and local village church needed to be informed of my presence and I needed to obtain their co-operation and assistance. In this situation there would be little chance of being a covert observer!

However, it was still necessary to involve the village women in the research, to gain their permission for all areas of observation and to make them a party to the results and continuing Christian education programmes we hope to base on the findings of the research. This was done verbally through 'key' people in each village who suggested participants and made the necessary introductions. In the first village, One Ox, it was the Village Head and the Leading Church Elder who made the arrangements, the church elder himself insisting that I stay with his family. Having explained to his wife that I wanted to study the everyday lives, skills, beliefs and values of the Christian women in the village, she proceeded to explain this clearly to everyone she contacted to help me.

Whilst no problems of access were encountered other than having to wait an inordinately long time (seven months) to complete all the bureaucratic processes of living in the country as a student researcher, Banister *et al.* (1994: 32) points out that: 'We need to consider the extent to which we have a right to record the behaviour of others in public and social settings, and issues of anonymity and confidentiality also need to be carefully considered.' Cohen, Manion and Morrison (2000: 316) warn that: 'Like other forms of data collection in the human sciences, observation is not a morally neutral enterprise. Observers, like other researchers, have obligations to participants as well as to the research community.' The temptation was

very great to note down all that I saw and record all the stories gossiped among the people. However, I eventually adopted as my criteria:

- Nothing would be entered into the thesis or any other part of the report or subsequent papers or writings that I would not be prepared to show to the person involved.
- That all names and identities would be changed in order to be totally anonymous. All people and town and village place names in this thesis are pseudonyms.
- As far as possible I would check back with each informant the accuracy of the information they had given me and also obtain their written permission to include it in written form.
- Whilst not anticipating any financial gain from the study I decided that should I make any I would ensure that those who had contributed to the study would share in that gain, although this was not communicated to the participants so as not to raise false hopes or expectations.

The use of local assistants also highlighted a further ethical dimension. The fact that the women were much freer in the local language meant that very often they would address their answers or tell their stories to the assistant rather than to me. Although it had been clearly explained that this material was for the research project and the agreement of the women had been sought and given, this needed further clarification when they addressed the assistants. However, permission was freely given in each instance and even though all names have been changed, a summary of the final report will be available to all of the participants before any wider publication of the thesis.

Sampling - Rationale for Selection of Sample

A major issue to address in the research design was the question of sampling and seeking to ensure that the sample was as representative as possible of Ngaju Dayak Christian women in these particular villages. It would be impossible to observe in all the Ngaju Dayak villages in Central Kalimantan and even in the ones selected, only a few members of the population could be sampled. A total of five villages were involved, the three selected for the ongoing research, plus another used for the pilot study and a fifth one used for a period of initial immersion into Ngaju Dayak language and culture. Even though only a sample of the population was selected, not all of the given group could be observed. In each of the three main study villages it was planned to select four to six women/families for more intensive observation. By using local knowledge to inform and guide I sought to select as representative families as is possible in such a research undertaking.

The three villages selected for the data collection were on the Kahayan, Kapuas and Manuhing rivers in Central Kalimantan where the majority of Ngaju Dayak people live. I have used the pseudonyms, One Ox Village, Hilltop Village and Rainbow Village for the communities studied. One Ox and Hilltop were quite remote whereas Rainbow was much more accessible being only thirty minutes by motorbike from the nearest city. Nevertheless mains electricity had not yet reached Rainbow or One Ox Villages. Hilltop had its own local generator supplying the whole District from approximately 17:00 – 22:30 hrs daily, providing diesel fuel was available. One Ox was still without mobile phone access, although communication towers are rapidly spreading across Central Kalimantan.

Access to Hilltop and One Ox villages was originally chiefly by river but in the past few years the roads have been extended and access is now possible via tarmac and dirt roads although depending on the season parts of both roads are still only passable by four-wheel drive vehicles. In all three locations I was told that rubber tapping was the main source of income.

Hilltop Village

This is situated on the Kapuas river. The journey takes around half a day depending on the season and condition of the road. Reliable statistics were very difficult to obtain, with numbers given often failing to add up and no suitable explanation available. I was informed by the District Office (*Kecamatan*) that in 2008 there were 3,085 people living in the village, of which approximately 60% were Ngaju Dayak, 30% Banjarese and 10% Javanese. Of these approximately 50% were registered as Protestant Christians, 30% were Hindu- Kaharingan, the ethnic religion of the Ngaju Dayak people, and 20% were Muslim.

Being the District Centre, in 2008, Hilltop Village had two Primary Schools with a combined total of 471 pupils, one Lower Secondary School with 200 pupils and one Upper Secondary School with around 230 pupils. These figures were obtained from the schools. The main sources of income in Hilltop Village after rubber, which was estimated to provide 45% of the income, were gold from the rivers, 35%, and retail trading, 20%. However, of those involved in retail trading only about 5% of the 20% were local Dayak people, the others were all 'incomers'. Because it is the District Centre it now has a small hospital with a doctor, a dentist, four nurses, two midwives and a nutritionist based there. However, in spite of all the facilities, Hilltop feels quite remote and cut off from the surrounding area.

One Ox Village

This village is on the Manuhing river. The journey again takes around half a day depending on the road and the season but in the rainy season is only really accessible by road in 4-wheel drive vehicles. According to the Village Head, in 2008, the total population of One Ox Village was 836 people divided among 169 families, of which 73 families were registered as Protestant Christian, 12 as Roman Catholic, 64 as Hindu-Kaharingan, approximately 10 as Muslims and the remainder whose religious affiliation was unknown.

There was one Primary School in the Village with 124 pupils, according to the headmistress. Pupils wishing to continue their education after year 6 had to leave the village, usually staying with relatives in larger centres where secondary schooling was available. The main source of income in One Ox Village was rubber tapping.

Rainbow Village

The third village selected was Rainbow Village on the Kahayan river. It was about thirty minutes by motorbike from a major centre of population. The village was prone to annual flooding which caused the last part of the road along the edge of the forest, to become impassable. Even though Rainbow Village is only a few miles from a large centre, it did not yet have mains electricity. The majority of households had their own generators which were usually operated from around 17:30 – 21:00 daily.

According to the Village Head, there were 165 people in 44 families living in Rainbow Village in 2008. These were all Ngaju Dayak people with the exception of two Javanese women who were married to Ngaju Dayak men, one Ma'anyan Dayak woman and one Bakumpai woman each married to Ngaju Dayak men. The majority, 159 people in 37 households, were nominally Protestant Christian in their religious affiliation, 7 families were Hindu-Kaharingan and 6 families were Muslim. The numbers relating to religious affiliation however are augmented by the addition of those in the next village where there is a mosque but no Christian church. Both Muslims and Christians from there were numbered as part of Rainbow Village. The figures for the Christian population were given by the lay head of the Christian congregation in the village (*Ketua Jemaat*).

Rainbow Village had one Primary School with 36 pupils ranging from years 1 to 6. The pupils from here wishing to continue their education could walk or cycle to a lower secondary school

in the next village or to an upper secondary school just a little further away. Alternatively young people could continue their schooling in the nearby city but because of the absence of public transport pupils needed to board with relatives or occasionally lived in hostels in the capital, usually returning home at the weekends. The same applied to the five or six young people currently continuing in higher education in the cities. The main sources of income for the people of Rainbow Village were rubber tapping, fishing and working at the tiny 'port' in the next village, where boats would come up the river from South Kalimantan and load and unload their cargoes. In spite of the proximity to the city, no-one worked there.

Criteria and Rationale for Selection of Participants

- Where possible to have 3 generations living under one roof or in close proximity in order to be able to observe grandparents interacting with grandchildren, parents with children and grandparents interacting with their children, i.e. the parents.
- All the family members are Ngaju Dayak native speakers because although most of the village people are to some extent bi-lingual, the mother-tongue of the Ngaju Dayak people is Ngaju Dayak. Therefore to try to ensure ease of communication and Ngaju Dayak ethnicity, families where Ngaju was the mother tongue and the normal means of everyday communication, were chosen.
- Where possible, formal education has been limited to primary school or lower secondary school. The reason for this is because to continue in school above grade 6 would generally have involved the pupils living away from the village and would have exposed them to a more 'western, scientific' style of education, which may well have influenced their own styles of informal teaching.
- Willingness to have the researcher stay with them as a part of the family and/or willingness to have the researcher intrude frequently and significantly into their daily lives!

Whilst it was important to try to select families carefully in order to fulfil the criteria above as far as possible, it was also important to stress that this was not a means of making money or gaining status, which could have led to rifts and jealousy within the village. Obviously the host families selected were reimbursed for all food and living expenses. Other families who gave of their time and effort to share their lives with me, teach me, talk to me, answer my

endless stream of questions, were thanked with gifts of food or, where appropriate, books brought from the town.

How the Sample was Selected

As anticipated, given the relatively small size of most of the villages concerned, the number of families fulfilling the criteria was limited. Following discussion with the Village Head in the first village and other Elders in the subsequent villages, host families were selected although they were partially self-selecting, i.e. those who were able and willing to accommodate the researcher. However other participants were selected after discussion with the Village Elders and or the Church Elders and in accordance with the criteria set out above.

Rationale for planning to use four to six families per village for eight plus weeks

The research focused on how Ngaju Dayak families transfer their skills, beliefs and values to their children and grandchildren. In view of the breadth of behaviours to be studied, the time frames involved, and by virtue of being a 'living in' observer in at least one family in each village, it was not possible to or desirable to try to observe too large a number of families per village. In order for any useful data to emerge, a total of eight to nine weeks was considered to be a sufficiently long enough period in any one village to gather it. It would also seem to be pushing the boundaries of friendship beyond reasonable limits to expect the families concerned to host me for longer than three or four weeks at a time, and for more than eight to nine in total! The pilot study and initial immersion period were in addition to this.

In practice there were five main participants in Hilltop village, eight in One Ox and four in Rainbow, mostly involving their families, making a total of seventeen main participants from all three villages plus a number of other people who were willing to be observed or interviewed on an informal basis and who also gave written consent for their contributions to be included. In the data tables they have been identified as 'Ibu', 'Mama' and 'Indu' followed by their pseudonym. The Indonesian word usually translated mother or Mrs. is 'Ibu'. Another word commonly used for a married women with children in Indonesian is 'Mama' and the Ngaju Dayak equivalent is 'Indu'. Thus Ibu, Mama and Indu are all interchangeable terms for 'mother'. In this research, however, I have chosen to use 'Mama' for all of the female, married, participants in One Ox village, 'Ibu' for those from Hilltop village and 'Indu' for those from Rainbow, simply for the sake of distinguishing them. The men or fathers, where they appear, are all called 'Bapak' or 'Pak', common words used in both languages for 'father' or an older or married man. Pen portraits of all the participants can be found in Appendix 3.

Timing and Collection of Data

The programme for a stay of approximately eight to nine weeks in each of the three main study villages took place between August 2007 and November 2008 and was interspersed with periods out of the villages living back in the city for times of reflection and data analysis. The initial period of one month's 'saturation' and language study took place in a different village, during January to February 2007 and the pilot study from April to June 2007.

Whilst an initial timetable and programme had been drawn up as a pattern for each of the villages, particular local, climatic and other circumstances meant that each village needed to be considered separately and a specific programme arranged in conjunction with the local elders and particular local situations. Generally speaking the first few days in each village involved making acquaintance with the Christian congregation, the village elders and other local officials, and making arrangements with host families. This was followed by one to two weeks of descriptive observation when I would walk around the village, sit in front of people's houses or go in and visit them when invited and observe and chat, explaining to them the purpose of being in the village and obtaining their permission to record anything that I observed. I then returned to the city for a few days of analysis and reflection after which I went back to the same village to continue with more focussed observations. These were observations and interviews of the specific skills, beliefs and values that I had observed or wanted to enquire about. I stayed carrying out these observations and interviews for a further one to two weeks. This pattern was repeated until I had completed the observations and interviews in each village – usually a period of eight to nine weeks in total.

A total of fifty three observations were recorded, sixteen descriptive and thirty seven focused; fifty eight interviews were carried out, forty seven of which were informal semi-structured and eleven informal structured ones. Nine of the fifty eight interviews were recorded electronically. Seven different women allowed me to spend a day or a significant portion of a day with them following whatever they were doing. I was able to learn how to tap rubber trees, plant and harvest rice, observe and assist in people's shops, take part in the daily washing, shopping, preparation of food and numerous other daily tasks. This is referred to as 'women shadowed' in Table 1 overleaf.

Table 1 Numbers of observations and interviews

Village	Observations			Interviews		
	Descriptive observations	Focused observations	Women shadowed	Informal semi-structured interviews	Informal structured interviews	Electronically recorded interviews
One Ox	7	11	6	20	5	3
Hilltop	2	25	1	15	3	3
Rainbow	7	1	0	12	3	3
Sub –total	16	37	7	47	11	9
Total	53		7	58		9

Analysis

Analysis took place concurrently with the data gathering. Observations were recorded mainly in English, the first language of the researcher, although verbatim comments were recorded in the local Ngaju Dayak language or the national language, Indonesian. They were initially recorded in the Field Notes and were transcribed and expanded as soon as possible after each period of observation, usually the same or following day. The nine interviews which were recorded electronically averaged sixty minutes each, the longest being two hours and the shortest twenty five minutes. They were transcribed from the local or national language in which they had been recorded, by my assistant, Nova. They were transcribed into Indonesian and subsequently translated into English by me. The interviews which were not recorded electronically were generally of around an hours duration.

Content analysis was then carried out across all of the observation and interview data for each of the villages using the nine questions below:

1. What skills do these particular Ngaju Dayak Christian women possess?
2. How are they passing on these skills to the next generation?
3. Which skills are/are not being passed on and why/why not?
4. What beliefs do these particular Ngaju Dayak Christian women possess?
5. How are they passing on these beliefs to the next generation?
6. Which beliefs are/are not being passed on and why/why not?
7. What values do these particular Ngaju Dayak Christian women possess?
8. How are they passing on these values to the next generation?
9. Which values are/are not being passed on and why/why not?

The content analysis process

1. As the main research question was ‘How do Ngaju Dayak Christian women in three rural communities in Central Kalimantan pass on their skills, beliefs and values to the next generation?’ the three domains of skills, beliefs and values were pre-assigned. During an initial reading of the expanded field notes each domain was assigned a colour. Any reference to a skill in the data was coloured in orange, references to beliefs in green and to values in yellow.
2. A single entry from the expanded field notes of one village, consisting of observation or interview data, was examined firstly for all references to skills and how they were or were not being passed on. As stated in chapter three, skills were broadly defined as the knowledge of how to do something and the ability to do it. The skills selected for analysis were the daily living skills which I observed being practised by the Ngaju Dayak people in the course of their everyday lives.
3. Blank Analysis Work Sheets were produced for each of the nine questions above, and each entry was recorded on the sheet including its references in the expanded field notes as seen in the example below. The reference in the left hand column under the heading ‘code’ refers to the location as recorded in those notes, e.g. HT = Hilltop Village.

Table 2 Analysis work sheet – skills (what?)

1) What skills do Christian Ngaju Dayak village women possess?

Code	Page	Line	
<i>HT</i>	<i>10</i>	<i>2, 10,</i>	<i>Rubber tapping</i>
<i>Obs.</i>		<i>29.</i>	
<i>4</i>	<i>10</i>	<i>2</i>	<i>Cultivating fields</i>
	<i>10</i>	<i>19</i>	<i>Making & selling cakes</i>

Obs.4 = Observation 4

4. This process was repeated throughout the data for that village until all references to skills had been recorded.
5. From the information on the Analysis Work Sheets a taxonomy of skills found in each village was drawn up (see Appendix 2).

6. Similar Analysis Work Sheets were completed for the second two skills questions asking 'How are these skills being passed on?' and 'Which skills are not being passed on and why not?' (See examples below)

Table 3 Analysis work sheet – skills (how?)

2) How are they passing on these skills?

Code	Page	Line	
<i>O.O. ISS. 1</i>	4	-	<i>Cultivated fields - mother & father - children taken, explained, tried it, followed the example of their parents</i> <i>Rubber tapping - father - guided hands, showed them, tried it</i>

ISS = Informal semi-structured interviews

Table 4 Analysis work sheet – skills (which?)

3) Which skills are not being passed on and why?

Code	Page	Line	
<i>ISS.1 o.R</i>	25	63-64	<i>Indu Helen's children - all been taught all the ways of earning a living except traditional handicrafts because mother doesn't want to do them any more - too hard work, has difficulty seeing</i>

7. Information on how skills were passed on, was tabulated as in the example overleaf.

The references on the left hand side are to the location of the data in the original expanded field notes and interview transcriptions, and are not included in the final tables.

Table 5 Income generating skills

Rubber tapping – Rainbow Village

Ref.	Skill	Teacher	Learner	Method of Teacher	Method of Learner	Teaching/ Learning Location
ISS.10R:25. 46-48	Rubber tapping	Parents of Indu Helen	Indu Helen	Demonstrated, instructed	Had to participate from year 3 Primary School	Rubber plantation
ISS.10R:25. 63-64	Rubber tapping	Indu Helen	All Indu Helen's children, boys & girls	Demonstrated, instructed	Observed and participated	Rubber plantation
ISS.11R:27. 59-61	Rubber tapping	Parent's of Indu Ana	Indu Ana	Took her, from 13yrs to watch and expected her to help	Observed and participated	Rubber plantation
ISS.11R:28. 68-70	Rubber tapping	Indu Ana	Indu Ana's 2 eldest children (girls)	Took them along, showed them, expected them to help	Observed and participated	Rubber plantation
ISS.12R:31. 50-51	Rubber tapping	Parent's of Indu Joni	Indu Joni	Taken when in yr 6 Primary School, showed her, let her try	Observed and experimented	Rubber plantation
ISS.12R:31. 61	Rubber tapping	Indu Joni	Indu Joni's 8 children, boys & girls children	Took them when small, showed them, let them try	Observed and experimented	Rubber plantation

The skills were those recorded in the taxonomies referred to in point 5 above, and organised in these tables according to their order in the taxonomies.

8. This process was then repeated for the second and third villages.

9. The processes from 2 - 7 above were repeated for the beliefs domain and then for the values domain for all three villages without the inclusion of taxonomies.

10. As explained above, beliefs were limited to the range of beliefs surrounding the four key life events and concerns that clearly impact on the behaviour and life-style of Ngaju Dayak Christian women and where the outcome of these particular beliefs could be observed in resultant behaviour. They were:

- Pregnancy and birth

- Death, burial and the after-life
- Spirits, omens and other supernatural phenomena
- Ensuring subsistence

11. Values were deemed to be those which the literature had highlighted and which had, to some extent been observed in the Ngaju Dayak people during earlier periods of residency in the villages, plus others which were observed during the data collection period.

12. Explanation of Categories.

The terms used in the Tables emerged from the content analysis and were then tabulated.

The terms used in the headings are common to all three domains. They are:

Teacher: The principle person(s) passing on the skill, belief or value to the learner.

Learner: The one learning the skill, belief or value either consciously or unconsciously.

Consciously here refers to the deliberate attempting to pass on of the skill, belief or value as opposed to it happening unconsciously or incidentally.

Methods of the teacher: The ways in which the skills, beliefs and values were being passed on, whether or not that was being done consciously or unconsciously.

Methods of the learner: The way in which the skills, beliefs and values were acquired by the learner.

Some terms are used in all three of the domains whilst others are specific to one domain. They are explained in the tables overleaf where the learning skills have been placed alongside the teaching skills where they mirror one another, e.g. 'demonstrates' is placed alongside 'observed' the two being complementary. Ways of teaching beliefs have been matched to ways of learning beliefs and likewise for values.

Table 6 Terms used in teaching and learning skills

Ways of teaching skills:	Ways of learning skills:
Demonstrates: deliberate, conscious demonstration of an action in order to show someone else how to perform it.	Observes: implies the learner is present and sees the skill performed – either deliberately watching or incidentally (consciously or unconsciously).
Models: unconscious performance of an action whereby someone is able to observe and learn how to perform it.	Experiments: the learner tries to perform the activity for themselves. Participates: the learner was expected to take part and perform the skill in order to assist the teacher.
Repeats: an action performed a number of times over either at the time or could be over a period of years.	Imitates: follows the example of the teacher and tries to perform the activity.
Participates – expected: the teacher expects the learner to take part in the activity. Non participation may result in some kind of sanction.	Participates: the learner was expected to take part and perform the skill in order to assist the teacher.
Participates – invited: the teacher invites the learner to take part in the activity but has free choice.	Included passively: the learner is taken along and is present when the activity is being performed.
Guides: hands on guidance by the teacher often holding and guiding the hands of the learner.	Practises: learner performs the skill until sufficiently competent.
Displays visually: any way in which anything visual is used by the teacher to help the learner e.g. pictures, television programmes, enacted ceremonies.	Experiences: the learner experiences the situation for him/herself by being a part of it or by carrying out the activity.
	Absorbs: although seemingly passive in the situation the learner takes in what is taking place.
Instructs: verbal explanation of the way to perform the activity/process.	Listens: hears and remembers what is said.
Advises: verbal suggestions as to the best way to do something.	
Reads: information is read to the learner by the teacher .	
Tells stories: information/teaching given via a story e.g. sharing personal experience, other people's experience or telling a traditional, folk or Bible story.	
Instructs formally: Instructions are given in a formal setting e.g. school.	Completes assignments: assignments given in formal college learning situation some practical work: as part of teacher training course.
Writes: any way in which something is written down by the teacher in order to teach it.	Copies: refers to formal or semi-formal situation where learner is writing what is written by the teacher.
Question and answer: the teacher questions the learner in order to facilitate learning. The learner participates by answering.	Solves problems: in a formal learning situation where mathematical problems are solved.
Punishes: any sanction applied by the teacher is learning does not take place as the teacher expected.	Performs: doing an activity or acting out in front of an audience.

Table 6 Terms used in teaching and learning skills (cont.)

Ways of teaching skills:	Ways of learning skills:
Co-operate: working together on a task.	Reads music (tonic-sol-fa): singing/reciting the tonic-sol-fa notation in order to sing the correct note.
Recites: repeating of information verbally from memory.	Memorises/remembers: committing information to memory for future use and to pass on to others.

Table 7 Terms used in the beliefs domain (not included in skills above)

Ways of teaching beliefs:	Ways of learning beliefs:
Taboos: something forbidden according to the tradition of the people, the violation of which will cause harm either to the violator or to some other person/people.	Experience interpreted by tradition: phenomena or experiences understood with reference to traditional beliefs and/or stories.
Tells stories (of the experiences of the older generation): memories and anecdotes passed down from former generations.	
Orally transmits: passed on by word of mouth.	
Explains: the meaning of or reason for an action, belief or value is given.	
Sings: Christian hymns and songs sung either from memory or from a book.	
Traditional law (adat) written down and orally transmitted to the younger generation: the rich tradition from the ancestors enshrined in the traditional law and cultural practices, now written down but formerly it only existed in verbal form.	

Table 8 Terms used in the values domain (not included in beliefs and skills above).

Ways of teaching values:	Ways of learning values:
Peer group pressure: pressure to comply with the norms of the group.	Concurs/obeys: takes the teacher's advice, does what they are told.
Persuades: usually using verbal means to make someone change their mind.	Experiences (and responds to punishment): learning by reacting positively to punishment.
Encourages: supporting and giving confidence to someone, usually verbal.	Practises: conform, accept and demonstrate the value.
Commands/Insists: giving instruction in a way which must be complied with at the risk of sanctions if it is not.	
Requests: asking someone to do something but with no compulsion attached.	
Reprimands: verbal telling off.	
Implicit teaching through inaction & non-intervention: no action is taken and so learning is deduced.	
Tradition: Either what has always been done in that society or the more formal 'tradition of the elders'.	
Expects: the assumption by the teacher that the learner will conform.	
Concedes: gives in and no further action taken.	
Condone: agrees with often by implication, action or inaction, rather than explicitly giving verbal assent.	
Facilitates: enables	
Exhorts: similar to encourage but rather stronger.	
Emotional involvement: the teacher feels for the learner at an emotional level.	

13. The information from the third question in each domain about which skills, beliefs and values were or were not being passed on and why or why not, was not tabulated but the issues were addressed at the discussion stage in the light of the evidence produced by the other two questions. This is discussed in more detail in chapter 8.

Credibility

Given that the research paradigm selected for this research is a subjective, interpretive one using qualitative research methods of data collection, the question of validity, whilst still important, is somewhat different from that addressed by quantitative research. Cohen, Manion and Morrison (2000:105) make a helpful distinction explaining that whilst formerly, taking the lead from quantitative research, validity was understood in terms of the suitability and effectiveness of the instrument to measure what it claimed to measure, 'in qualitative

data validity might be addressed through honesty, depth, richness and scope of the data achieved, the participants approached, the extent of triangulation and the disinterestedness of the researcher.' Lincoln and Guba (1985: 219) suggest the term 'credibility' in place of internal validity and 'transferability' in place of external validity. Credibility has therefore been selected in preference to validity. The question of the researcher's disinterest or otherwise has been addressed in chapter 1 in the section on 'Situating Myself in the Research'.

Nevertheless, the questions of credibility and transferability still need to be addressed. Lincoln and Guba (1985: 301) give a helpful 'checklist' for 'increasing the probability that credible findings will be produced'. They suggest three ways to increase the probability of credibility in the field. The first of these, 'prolonged engagement in the field' was adequately covered by the researcher spending around forty weeks in total in the field and a total of eight to nine weeks in each of the main locations. Their second point of 'persistent observation' (pp. 304-305) was also covered as the principal method of data collection was that of a participant observer, living in the homes of the families that are being observed.

Thirdly they cite 'triangulation', 'the third mode of improving the probability that findings and interpretations will be found credible' (pp.305-307). The term, usually first attributed to Denzin (1970) refers to the use of multiple methods of data collection. Denzin (1978) proposed four different types of triangulation, three of which are considered valid by Lincoln and Guba (1985) and used in this research. The first, that of using different sources, is achieved to some extent by using a number of different families and individuals in different villages and comparing the data. Data is also compared with other written sources. This should go some way to ensuring that results are not specific to the one family or one village. Methodological triangulation also took place through the use of mixed methods of data collection – participant observation, informal unstructured and semi-structured interviews. 'Investigator triangulation', (Silverman 1993, Brewer 2000) can be achieved by using more than one observer (or participant) in a research setting. As stated above, in this research Ngaju Dayak research assistants were used to help in the interview process. As one of them also helped to transcribe and translate the recorded interviews there was a possibility of their personal perceptions and biases contaminating the data, but constant reminders were given of the need for impartiality. In addition, questions were asked frequently to check and cross check assistants interpretations with those of the participants. Where the assistants have 'explained' data this has been acknowledged as their opinion or interpretation in the thesis.

Other forms of triangulation such as time triangulation occurred as semi-structured interviews encouraged the participants to reflect on their own learning and teaching and when compared with the observations of these same participants' styles or ways of transmitting knowledge now, may reflect to some extent differences that have occurred over time.

Lincoln and Guba (p. 308) also include 'peer debriefing' which they describe as 'exposing oneself to a disinterested peer in a manner akin to cross-examination'. This was undertaken with the research assistants who were from the same ethnic group as the one being studied but from different towns or villages. The data, which had been shared with them also by the participants, was constantly discussed with them and checked for credibility.

Next Lincoln and Guba talk about 'negative case analysis' in order to revise 'the hypotheses with hindsight.' (p. 309). An attempt has been made to examine the negative cases and to ensure that the theory covers the majority of cases.

Finally they suggest 'member checking' (pp. 314-316). This is respondent validation, whereby the original people from whom the data was collected have the opportunity to validate it, correct it, add to it or subtract from it. Lincoln and Guba (1985: 314) claim that this 'is the most crucial technique for establishing credibility'. The aim had been that wherever possible, following the transcription of each interview, the interviewee(s) would be read the transcript and asked to comment on the accuracy of it and whether they wished to make any alterations to it. In practice, however, this proved to be more difficult than anticipated due mainly to time restraints and transport difficulties on the final follow up visits, which meant that this process was carried out in a more general way through informal conversations checking the accuracy of previous given information but in rather less detail than initially envisaged.

In the twenty plus years since Lincoln and Guba (1985) wrote their book, qualitative research has moved on and many other forms of credibility or validity have been posited. Richardson, (1997) introduced another form which she calls 'crystalline' validity. She proposed, 'that the central imagery for "validity" for postmodernist texts is not the triangle- a rigid, fixed, two-dimensional object. Rather the central imagery is the crystal.' She continues:

Crystallization, without losing structure, deconstructs the traditional idea of "validity" (we feel there is no single truth, we see how texts validate themselves); and crystallization provides us with a deepened, complex, thoroughly partial understanding of the topic. Paradoxically, we know more and doubt what we know (Richardson, 1997: 92).

Denzin and Lincoln (2008: 8) referring to Richardson's work comment: 'Triangulation is the simultaneous display of multiple, refracted realities. Each metaphor "works" to create simultaneity rather than the sequential or linear.' This provides an attractive way of authenticating the data. In this research, where the women's perceptions and opinions have been sought, it seems inappropriate to talk in terms of the data being 'true'. I can only claim to have reported and interpreted the ideas and opinions of certain Dayak women as faithfully as possible.

Generalization

To populations

'For ethnographers human behaviour is infinitely complex, irreducible, socially situated and unique' (Cohen, Manion and Morrison 2000: 109). The data collected in this study is intended to describe the particular families selected as participants. Given that the design of the research is basically that of ethnographic case-studies, it is doubtful that the findings can be transferred to other people groups or even to other Ngaju Dayak populations. As Yin (1994: 37) notes,

A common complaint about case studies is that it is difficult to generalize from one case to another. Thus analysts fall into the trap of trying to select a "representative" case or set of cases. Yet no set of cases, no matter how large, is likely to satisfactorily deal with the complaint.

He continues by suggesting that rather than trying to find the illusive representative case one should generalize to theory.

To theory

The data gathered from the three target villages used in the research was therefore analysed with reference to the educational theory which would seem to underlie it. I have sought to establish to what extent the learning experiences of the Ngaju Dayak people reflect the key components of situated or social cognition theory, i.e. is the learner the 'cognitive apprentice, learning on the job and learning by doing – learning in context'? (Brown, Collins and Duguid 1989: 7). Further, I have sought to establish whether the data supports the notion of McLellan (1996: 24) who talks about 'learning being a process of enculturation whereby the learner picks things up from the ambient culture rather than being explicitly taught things' Lave and Wenger's 'legitimate peripheral participation' was also examined to see how far the data supports the idea that, 'learners inevitably participate in communities of practitioners and

that the mastery of knowledge and skill requires newcomers to move toward full participation in the socio-cultural practices of a community' (Lave and Wenger 1991: 29).

The data provides the means to judge the applicability of the underlying theories of situated cognition and social cognition to the object of the research. However, given that the methodology used is that of ethnographic case-studies, it was anticipated that the data might also provide the basis of subsequent variations on the theory, arising from the data findings.

Ecological Validity

Ethnographic research employing largely naturalistic observation methods and informal interviews among a people who are known to some extent by the researcher and are of the same religion, and using assistants from the same ethnic group and religion should help to minimise the possibility of ecological invalidity. I trust that my assistants and I know and understand to some small degree, the backgrounds and lives of these people. The women have all been observed and interviewed in their everyday, life situations. Nevertheless it would be foolish to underestimate the degree to which the data can still be contaminated.

The 'Hawthorne effect' is very difficult to eradicate from the research. It is almost inevitable that the participants will perform differently in some way, however small, as a result of being observed. A distinct change came over one informant when she became pregnant and wanted on the one hand to continue to use the traditional charms and potions and to carry out her native customs as a pregnant women, and on the other hand did not want me as someone perceived as being from the developed world with a different set of beliefs and values, to see what she was doing. She spent much time avoiding any contact, having initially been very open and forth-coming. I wondered if others had held back from hitting children or speaking to them harshly because I was present. In such situations, stories and explanations from participants and the assistants about their past experiences can help to clarify some of these situations. Also the fact of being in a particular situation for a reasonably long length of time, enabling trust and understanding to develop, can also help to minimise these effects. Great care has been taken throughout this study to try to be aware of any ecological invalidity.

Reliability or Stability

External reliability

Questions of reliability referring to the extent to which a study can be replicated are clearly much more problematic in qualitative research. 'Most qualitative designs baffle attempts at replication' (LeCompte and Preissle 1993: 332). 'Indeed the premises of naturalistic studies include the uniqueness and idiosyncrasy of situations, such that the study cannot be replicated – that is their strength rather than their weakness' (Cohen, Manion and Morrison 2000:119). Rather than looking at reliability in terms of the extent to which a piece a research may be replicated, Cohen, Manion and Morrison (2000:119) argue, 'In qualitative research reliability can be regarded as a fit between what researchers record as data and what actually occurs in the natural setting that is being researched.' Nevertheless, LeCompte and Preissle (1993: 334) claim that ethnographers can 'enhance the external reliability of their data'. This, they argue, can be done by recognizing and dealing appropriately with 'five problems: researcher status position, information choices, social situations and conditions, analytic constructs and premises, and methods of data collection and analysis' (p. 334).

Researcher status position refers to the social position of the researcher in relation to those being researched. This has been identified in this research in the section on 'positioning myself in the research.' The extent to which this particular research could be replicated will to a large extent depend on future researchers at the very least understanding my position as the current researcher. The social positioning of the research assistants is also important. The assistants were relatively young graduates, much younger than the people taking part in the research as participants. They had been educated in the city to graduate or Diploma level. Their ethnic background was the same as the participants and they also shared the same Christian religion.

By *informant choices*, Le Compte and Preissle (1993) mean future researchers being able to select participants similar to those involved in the original research. To the extent that this is ever possible it was accomplished by clear descriptions being given in this research of the backgrounds of the participants. This is included in the analysis section and Appendices 3 and 4.

Social situations and conditions mean that the social settings of the information being gathered must be accurately reported. This has been done to some degree in the descriptions of the villages given above and in the background/introduction in chapter 2 of the

thesis where the religious background, which is also a significant feature in the social setting of this research, has been discussed.

Analytic constructs and premises need to be clearly set out and understood by future researchers if the study is to have external reliability. To that extent I have sought in this research to clearly define the terms and concepts used, e.g. culture, Christian. The terms that have remained constant from the literature review and background study of the culture are stated and those which have been changed, generated or developed through the course of the research are also clearly stated.

Finally *methods of data collection and analysis* need to be clearly explained. These have been explained earlier in this chapter. It is hoped that the process is sufficiently transparent so as to allow other researchers to both understand and replicate, as far as possible, the methodology if desired.

Thus the five problems raised by Le Compte and Preissle (1993) with regard to external reliability have been addressed thoroughly and as far as is possible, external reliability has been attained in this research.

Internal reliability

Internal reliability raises the problem of how far different observers are able to agree about what they are observing. This is also known as inter-rater reliability (Denzin and Lincoln, 1994). In this research it raises the question of how an assistant and myself observe the families, trying to ensure a similarity between what is observed, for how long, where, who, under what circumstances etc. and always describing these aspects fully and clearly. In practice much continuous discussion occurred between the assistants and myself concerning what was being observed and the way it was being recorded, thus helping to ensure internal reliability. It is hoped that the combination of 'native' observers as assistants and a 'non-native' observer has enriched the interpretation of the data, enabling new insights to be discovered. The problem of the expectations of the observers could have arisen here from both native and non-native observers, however, it is hoped that the use of some electronic data gathering equipment and discussions of field notes minimised this effect. Also the women in the study were not just 'the observed' but also acted as interpreters of the data to some extent as we discussed with them what they were doing or what they believed and why. The data was thus collected and analysed and a report is given in the chapters that follow.

Chapter 5

SKILLS RESULTS: HOW SKILLS ARE BEING PASSED ON

The first step was to observe and note all of the skills that were being practised by the women in all three of the villages. As a result of the observations and interviews which were carried out, a detailed taxonomy of skills was drawn up for each village and also a combined taxonomy of skills which recorded the observed skills common to all three villages (see Appendix 2). Each of the skills recorded in the taxonomy was observed during the data collection period.

From the information gained it was decided that the large number of skills observed and recorded in the taxonomy could be categorised under eight headings: housekeeping, subsistence, (i.e. skills enabling the people to provide food for themselves), income generating, child rearing, recreational, traditional medical, communication and numeracy and Christian church related skills.

Some of the skill categories above were further sub-divided. Housekeeping included cooking, washing and cleaning and domestic animal husbandry. Subsistence skills were categorised as cultivating the fields/growing vegetables and fishing, reflecting the main sources of food in the villages. Generating income was divided into rubber tapping, retailing, extracting gold from the rivers, harvesting various natural forest crops, fish farming and making traditional crafts, although this last skill is not being passed on to the next generation. Communication and numeracy skills consisted of story telling, reading, writing, counting and calculating. Church related skills were not sub-divided but referred to singing, praying, organising and leading meetings, managing the finance etc.

The data was then tabulated, noting both the nature of the skills and the methods by which these skills were being passed on to the next generation, and by whom. There is some discussion of how skills are being passed on in each of the sections following with further, more in depth, discussion in chapters 8 and 9 which seek to combine the three domains and reflect more on the process and the reasons for it.

Housekeeping Skills

For the vast majority of Ngaju Dayak village women life consisted of keeping house and helping to grow or find enough food to feed the family and trying to make sufficient money from the land to pay for other necessities such as the further education or weddings of their children, fuel for generators and so forth. A large amount of time was taken up in providing meals for the family.

In the absence of a constant supply of electricity, refrigerators were not a feature of the average village kitchen in One Ox village. Also packaged and pre-packed foods were not generally available in the village apart from the ubiquitous instant noodles. As a result the daily gathering or buying of fresh food and cooking was a necessity.

Limited electricity was available to all the inhabitants of Hilltop village each evening enabling one or two people to have refrigerators, as they were able to extend the length of the supply time by use of their own generators. There was a larger number and variety of shops in Hilltop village than the other two locations studied. Meat or fish was often brought into the District from outside but this was on a daily basis so the daily gathering or buying of fresh food and vegetables, and cooking them, was still a necessity even here.

Rainbow village, also without mains electricity appeared not to have any households with a refrigerator. The only 'shops' in the village were two '*warung*' i.e. large kiosks, selling the basic necessities, including some vegetables but no meat or fish. Hence the daily gathering or buying of fresh food and cooking was as much of a necessity here as it is in the remoter villages.

Cooking/catering

Many of the housekeeping skills were observed in One Ox village in Mama Wona's home, but during her absence, when eighteen year old Wona was doing all the housekeeping (see Table 10). She caught, plucked, gutted and cooked a chicken with all the attendant spices, baked a type of bread and appeared very competent for someone of her years. When asked her how she had learned all of these things she replied, 'From my mother and from doing it'. Similar skills were repeatedly observed in other girls of comparable age in all three villages (see Tables 9 and 11).

Table 9. Cooking/catering skills – Hilltop Village

Skill	Teacher	Learner	Method of Teacher	Method of Learner	Learning location
Cooking	Mother, Ibu Anton	Younger teenage son (13)	Models	Experiments practises	Home kitchen
Cooking	Older women in the community	Younger women	Models	Observes, practises	Home kitchen
Cooking	Older women in the community	Younger women & younger children of the community	Models	Observes, practises	Someone's home
Sealing plastic bags with candle-flame	Older women in the community	Younger women & younger children of the community	Models	Observes, practises	Someone's home
Shopping	Mother, Ibu Anton	Older teenage son Anton(14)	Repeats	Repeats, memorises	Home & shops
Cooking rice	Mother, Ibu Laura	Laura	Demonstrates, expects participation	Observes, practises	Home
Cooking	Mother, Ibu Dani plus other women in District	Ibu Dani's daughters	Models	Observes, practises	Home & around village

Table 10 Cooking/catering skills – One Ox Village

Skill	Teacher	Learner	Method of Teacher	Method of Learner	Teaching/ Learning Location
Cooking – Lighting a wood fire and the kerosene stove	Mother	Married daughter – Wona 18yrs	Models	Observes, practises	Home
Boiling water, making tea	Mother	Married daughter – Wona 18yrs	Models	Observes, practises	Home
Preparing spices	Mother	Married daughter – Wona 18yrs	Models	Observes, practises	Home
Plucking and cooking a chicken	Mother	Married daughter – Wona 18yrs	Models	Observes, practises	Home
Preparing & cooking traditional food	Mother	Daughters – Wona & Lucy	Models	Observes, practises	Home/Hut in forest
Cooking pork	Mother	Daughters – Wona & Lucy	Models	Observes, practises	Home/Hut in forest
Bread/cake baking	Mother	Married daughter- Wona 18yrs	Models, expects participation	Observes, practises	Home

Table 11 Cooking/catering skills – Rainbow Village

Skill	Teacher	Learner	Method of Teacher	Method of Learner	Learning Location
Basic cooking skills	Mother - Indu Helen	All her children – boys & girls	Models, demonstrates, expects participation	Observes, participates	Home
Basic cooking skills	Mother – Indu Ana	All her children – all girls	Models, demonstrates, expects participation	Observes, participates	Home
Basic cooking skills	Mother – Indu Joni	All her children from about 12 yrs. old	Models, demonstrates, expects participation	Observes, practises	Home
Basic cooking skills	Mother – Indu Bella, Aunt - Nore	5yr old Bella	Models	Observes	Home
Basic cooking skills	Mother – Indu Raymond	All her 5 children, 3 boys, 2 girls	Models, expects participation	Observes, participates, experiments	Home

Washing and cleaning

Usually there is no running water in Ngaju Dayak village homes and only very rudimentary septic tank sanitation, if any, exists. Houses are made of wood and furniture rarely consists of more than one or two cupboards for clothes and perhaps one double bed. The villagers sit on the floor to chat, to cook and to eat. Washing and cleaning tasks are an essential part of the daily routine for these Ngaju Dayak women. The examples in Table 12 below from Hilltop village are typical of all three villages observed.

Table 12 Washing and cleaning – Hilltop Village

Skill	Teacher	Learner	Method of Teacher	Method of Learner	Teaching/ Learning location
Washing & cleaning	Mother Ibu Anton	Older teenage son (14) Anton	Models	Participates, practises	In the river/ in the home
Washing clothes	Mother Ibu Wilson	Sons and daughters	Models, expects participates	Participates, practises	In the home/river
General housekeeping skills	Mother Ibu Wilson	Sons and daughters	Models, expects participation, punishes	Imitation, practises	The home & surroundings
Washing and cleaning	Mother, Ibu Laura	Eldest daughter (12) Laura	Models, expects participation	Observes, practises	Home/river

Domestic animal husbandry

Domestic animals such as pigs and chicken were being reared in all three villages. The Ngaju Dayak people were originally followers of a tribal religion where the pig featured strongly in many of the traditional customs and celebrations. Now the majority have converted to Christianity and pork still plays an important part in traditional celebrations. Consequently, many Ngaju Dayak people still rear pigs at the back or side of the village home, normally keeping just one or two pigs in a pen. This sets them apart from the majority of Indonesians, who follow the Muslim religion where pork is forbidden (*haram*). The pigs are generally hosed down twice a day and much time is spent looking for food for them and preparing it.

Just about every village home will have its chickens - small, free range local birds fed each morning and evening, often by the children, providing a meal for the family from time to time and occasionally sold.

Dogs are also part of the traditional Ngaju Dayak way of life. They accompanied the men hunting or when they went to the rice fields or their vegetable gardens. Conversion to Christianity has not changed this aspect of life, unlike Islam where the dog, like the pig is considered *haram*. Many Dayak people keep dogs and feed them regularly but do not 'pet' them and often do not allow them into the house. In Rainbow village dogs were being reared both as pets and also to sell for food as the proximity to the provincial capital meant many people would go to the village to buy dogs, which were subsequently cooked and eaten as a speciality. One family in Rainbow were also rearing cows to sell for meat (see Table 13). Whilst not unique, this is not very common among the Ngaju Dayak villagers and was the only example in the three villages observed.

Table 13 Domestic animal husbandry - Rainbow Village

Skill	Teacher	Learner	Method of Teacher	Method of Learner	Teaching/ Learning Location
Rearing pigs	Parents (12 families in village)	All their children	Models	Observes, participates	Around the home
Keeping cows	Parents – Bpk, Indu Ana	All their 4 girls	Models	Observes, participates	Around the home
Breeding dogs	Bpk Raymond	All his children & grandchild	Models	Observes, participates	Around the home
Keeping chicken	Parents (most families in village)	All the children	Models	Observes, participates	Around the home

Subsistence Skills

Although roads are being built and communication with the cities and towns is improving, much of the food needed to feed the Ngaju Dayak families must still be grown within or around the village. This involves a wide range of skills. Providing food is the task of both the mother and father and so both parents were often involved in teaching the younger generation these skills. Grandmothers could sometimes be observed fishing with a rod.

Cultivating the fields

This was a major part of life in One Ox and Hilltop villages. In Rainbow village, however, cultivation of the fields did not take place because of the annual flooding, making the land unusable for growing crops.

In the Table 14 below there is a certain amount of overlap as the term 'cultivating the fields' can cover the whole process of cultivating rice and also all that is involved in growing vegetables. Some informants gave the information using the collective term whereas others spelt out the different processes.

Table 14 Cultivating fields – One Ox Village

Skill	Teacher	Learner	Method of Teacher	Method of Learner	Teaching/ Learning Location
Clear the forest	Mama, Bapak Lena's parents	Mama, Bapak Lena	Models	Passive inclusion, observes	Fields
Plant rice	Mother & father – Mama, Bapak Wona	Young married daughter – Wona	Models	Passive inclusion, observes	Fields
Plant rice	Grand-mother & grand-father	Mother & siblings	Models	Passive inclusion, observes	Fields
Plant vegetables	Mother – Mama Wona	Young married daughter - Wona	Models	Passive inclusion, observes	Fields
Weed the fields	Mother – Mama Wona	Young married daughter - Wona	Models	Passive inclusion, observes	Fields
Harvest the rice	Mother Mama Wona	Young married daughter - Wona	Models	Observes, practises	Fields
The complete rice cycle	Mama, Bapak Lena's parents Mother & father – Mama, Bapak Wona	Mama, Bapak Lena Young married daughter - Wona	Models	Passive inclusion, observes	Fields
Cultivating the fields	Mother & father – Mama, Bapak Yanti	Daughter (student) son (High school)	Models, includes, Instructs Invites participation.	Imitates, observes, practises	Fields
Cultivating the fields	Mother & father – Mama, Bapak Lena	2 sons, 4 daughters	Passive inclusion	Observes, practises	Fields
Cultivating the fields	Mother – Mama Edwin	7 children, boys & girls	Models	Observes, practises	Fields

Fishing

Whilst skills of cultivation were no longer being passed on in Rainbow village, they were still continuing to fish and to teach this skill to the younger generation. Fish can be caught with a rod or even with the bare hands in the dry season when the river is low (see Table 15).

Table 15 Fishing - Rainbow

Skill	Teacher	Learner	Method of Teacher	Method of Learner	Teaching/ Learning location
Catching fish with bare hands	Other villagers	Indu Joni	Models	Observes, experiments	River, streams
Catching fish with a rod	Mother – Indu Ana	3 eldest children (girls)	Models	Observes, participates	River

A great number of different ways of fishing are practised by the Ngaju Dayak. A full account can be found in the book edited by Klokke (2004) *Fishing, Hunting and Headhunting in the former culture of the Ngaju Dayak in Central Kalimantan*. However, of all the possible ways, the one that I most frequently observed being carried out by the Ngaju Dayak women was fishing with a rod. The women that I saw and talked to all enjoyed fishing as a hobby as well as it being a means of obtaining food. They fished with a simple home-made fishing rod with a simple nylon line attached, using worms which they dug themselves for bait (see Table 16).

Table 16 Fishing - Hilltop Village

Skill	Teacher	Learner	Method of Teacher	Method of Learner	Teaching/ Learning location
Fishing with a rod	Older women	Younger women (Mama Anton)	Models	Observes, experiments	Streams and rivers
Fishing with a rod	Mother	Ibu Laura	Models	Observes, participates	Streams & rivers
Fishing with a rod	Mother, Ibu Laura	Daughter Laura (12)	Models	Observes, participates	Streams & rivers

Income Generating Skills

Rubber tapping, extracting gold from the rivers, logging and harvesting other crops from the forest are still the main ways of generating income in the three Dayak villages

observed. Small scale retailing also plays a small but significant part in the lives of many of the families studied and a recent innovation building on the traditional fishing skills of the Ngaju Dayak people and encouraged by the local government, is fish farming.

Rubber tapping

The main means of generating income on the Kahayan, Kapuas and Manuhing rivers is growing and tapping rubber. Whilst not indigenous to the Dayak people rubber was introduced during the colonial era and is considered by the current generation to be a traditional skill and an inherited 'right' of the Dayak people. This 'right' is under threat at the beginning of the twenty first century from those who are keen to replace large areas of forest and rubber plantations with palm oil plantations. The people in the three villages studied were all resisting this development at the time of the study, preferring the known to the unknown and the rights of 'ownership' of the forest to being employees.

In One Ox village the major way of earning money was by planting and tapping rubber. Many of the families had plantations, often handed down from previous generations as the traditional rubber trees take around fifteen years to mature before they can be tapped. Those who did not have plantations or whose trees were not yet mature, worked for other people whose trees were mature. At the time of beginning the data collection in 2007, the price of latex was rising steadily and was providing quite a good return for the villagers, causing some to switch from their subsistence rice farming and invest time and labour in the rubber trees, which enabled them to have sufficient money to buy rice as well as pay for schooling for the family and often to also have at least some 'luxury items' such as a television, DVD player and/or their own generator. With the global monetary crisis of 2008, the price plummeted causing some difficulties particularly for those acting as 'middle men' who had bought the latex at a higher price and were now only able to sell it on at a loss.

Because of its importance, six of the participants in One Ox village either told me about their rubber tapping activities or, in the case of Mama and Bapak Lena and Mama Andi, they actually took me along to teach me how to do it (see Table 17 overleaf).

Table 17 Rubber tapping – One Ox Village

Skill	Teacher	Learner	Method of Teacher	Method of Learner	Teaching/ Learning Location
Rubber tapping	Father, Bapak Yanti	Daughter (18yrs), Sons (15,11yrs)	Includes, models, demonstrates, guides, invites participation	Observes, practises	Rubber plantation
Rubber tapping	Parents – Bapak & Mama Lena	4 Daughters, 2 sons	Includes, models, demonstrates, guides, invites/expects participation	Observes, practises	Rubber plantation
Rubber tapping	Father – Bapak Wona	Young married daughter - Wona	Includes, models, demonstrates, guides, invites participation	Observes, practises	Rubber plantation
Rubber tapping	Mother – Mama Edwin	8 children, boys & girls	Includes, models,	Observes, practises	Rubber plantation
Rubber tapping	Bapak & Mama Lena	Myself	Includes, demonstrates, guides, instructs.	Observes, practises	Rubber plantation
Selling on the latex	Father – Bapak Yanti	Daughter Sons	Models	Observes, practises	Rubber plantation/ riverside

Retailing

One Ox village was one hours drive from the nearest small town and about half a days drive from a bigger city, depending on the season and condition of the road. It could therefore be quite difficult to obtain basic supplies needed for day to day living. The road has improved somewhat in recent years and that has enabled more goods to be brought from the towns to be sold in the village. A number of the Ngaju Dayak women in One Ox village were involved in small scale retailing ventures, which in turn involved them in other skills such as book-keeping and performing basic calculations.

Table 18 Retailing – One Ox Village

Skill	Teacher	Learner	Method of Teacher	Method of Learner	Teaching/ Learning Location
Retailing	Mother – Mama Yanti	Daughter (18yrs), sons (15,11 yrs)	Models	Observes, practises	Shop
Book-keeping	Mother - Mama Yanti	Daughter (18yrs) Son (15yrs)	Instructs	Listens, observes, practises	Shop/ home
Retailing	Mother – Mama Wona	Young married daughter, Wona	Models	Observes, practises	Shop
Making & selling meat balls	Mother – Mama Natan	Daughters and daughters in law	Models/ demonstrates	Observes and practises	Shop/ home
Making & selling iced drinks	Mother – Mama Natan	Daughters and daughter's in law	Models/ demonstrates	Observes and practises	Shop/ home

Extracting gold from rivers

In Hilltop village, as on many of the rivers of Central Kalimantan, intermediate technology is employed to extract the gold from the rivers. Using a diesel powered engine to pump sand and water from the river, it is then filtered as it flows down a ramp back into the river. Whilst this is now regulated by the government and permits must be obtained, I was assured by the local people that this is still one of the main ways of generating money on the Kapuas river.

Table 19 Extracting gold from the rivers – Hilltop Village

Skill	Teacher	Learner	Method of Teacher	Method of Learner	Learning location
Panning for gold	Parents Ibu, Bpk Wilson	Children	Models	Observes, participates	The river
Panning for gold	Friends of Ibu Dani's sons	Ibu Dani's sons	Models	Observes, participates	The river
Panning for gold	Ibu, Bpk Wilson themselves, an uncle	Ibu, Bpk Wilson	Instructs	Experiments	The river

A corollary to this in Hilltop village was one family engaged in making gold artefacts. Whilst extracting gold from the river can be observed along many of the rivers of Central Kalimantan, this was the only instance that I heard of, of the people themselves making jewellery or other artefacts from the gold. However, Mama Dani told me she had learnt to make gold jewellery and artefacts from her husband but after his early death she had passed on this skill to one of her sons who in turn had taught his wife.

The forest has traditionally been the chief means of support for Ngaju Dayak people from where they still gather a variety of crops, although demand for some of the traditional ones is diminishing with the advent of synthetic substitutes. Nevertheless I observed, and was informed about, a number of crops still providing essential income for the families.

Collecting rattan

Rattan grows wild in the forest and can be collected and sold on for making many traditional items of furniture and artefacts. From the evidence below it is a task more often undertaken by a group and often by a group of women.

Table 20 Collecting rattan – Rainbow Village

Skill	Teacher	Learner	Method of Teacher	Method of Learner	Learning Location
Collecting rattan	Other women	Indu Helen	Models, invites participation	Participates, observes, experiments	Forest
Collecting rattan	Indu Helen	All her children (boys and girls)	Models, invites participation	Participates, observes, experiments	Forest
Collecting rattan	Other women	Indu Ana	Models, invites participation	Participates, observes, experiments	Forest
Collecting rattan	Indu Ana	2 eldest children (girls)	Models, invites participation	Participates, observes, experiments	Forest
Collecting rattan	Other women	Indu Joni	Models, invites participation	Participates, observes, experiments	Forest
Collecting rattan	Indu Joni	All her children (boys and girls)	Models, invites participation	Participates, observes, experiments	Forest

Collecting and selling traditional roots

The roots, known locally as *teken-parai* grow wild in the forest and are collected, often by the women in communal groups, and sold on for use in traditional medicine. At the time of writing they had ceased collecting the roots as they were becoming very difficult to find and outlets for selling them on had dried up.

Table 21 Collecting traditional roots – Rainbow Village

Skill	Teacher	Learner	Method of Teacher	Method of Learner	Learning Location
Collecting <i>teken-parai</i> roots	Other women	Indu Helen	Models, invites participation	Participates	Forest
Collecting <i>teken-parai</i> roots	Indu Helen	Indu Helen's children	Models, invites participation	Participates	Forest
Collecting <i>teken-parai</i> roots	Other women	Indu Joni	Models, invites participation	Participates	Forest
Collecting <i>teken-parai</i> roots	Indu Joni	Indu Joni's children	Models, invites participation	Participates	Forest

Fish farming

Recent government financial assistance has meant that nineteen families in Rainbow village are now farming fish to sell to the city dwellers. Two of my participant families were engaged in this, which seems to involve the whole family although it is the young men who are usually seen in the water and actually handle the fish in the river. A neighbouring family was also observed 'harvesting their crop' on one occasion, apparently selling it to a family who had arrived by boat to buy it.

Table 22 Fish farming – Rainbow Village

Skill	Teacher	Learner	Method of Teacher	Method of Learner	Teaching/ Learning Location
Fish farming	Indo Ana's husband	Indu Ana	Demonstrates	Participates	River
Fish farming	Bpk Raymond	Raymond	Demonstrates, co-operates	Participates	River

Logging

Whilst this is now much more heavily regulated by the government, illegal logging still continues as well as some legal undertakings. My assistant from Rainbow village informed me that illegal logging is still carried on by a number of families in the village.

Child Rearing

In the context of the extended family, child rearing skills are observed, absorbed and practised from a young age with older siblings having to look after younger ones. Young mothers are supported by their own mothers, grandmothers, mothers-in-law and aunts in the bringing up of the children. The way in which parents passed on the skill of teaching

or facilitating the development of their children in the areas of physical and social development was noted in each of the villages. Obedience to parents is very important in Ngaju Dayak society. This and disciplining children is considered in the 'values' domain. Table 23 overleaf is taken as an example from Rainbow village and a similar pattern can be seen in Table 24 from One Ox village.

Table 23 Child rearing – Rainbow Village

Skill	Teacher	Learner	Method of Teacher	Method of Learner	Teaching/ Learning Location
Physical					
Cradling, rocking to sleep small babies	Mother, grandmother	Daughters, grand-daughters	Models	Observes, imitates	Home
Bathing child in river	Mothers, other parents.	Aunt Nova	Models/ demonstrates	Observes, imitates	River
Social					
Interaction with other children (play together)	Other pre-schoolers	Bella	Models, involves	Observes, participates imitates	Home & village
Interaction with other adults (living in 3 generational extended family)	Older generation	Younger generation	Models, includes	Participates, observes, imitates, absorbs	Home

Table 24 Child rearing – One Ox Village

Skill	Teacher	Learner	Method of Teacher	Method of Learner	Teaching/ Learning Location
Physical					
Nursing, feeding, rocking to sleep Wona's baby	Wona's mother	Wona	Models	Observes, participates	Home
Nursing, feeding, rocking to sleep Wona's baby	Marty's mother, Mother in law, wife	Wona's husband, Marty (father of baby)	Models	Observes, imitates	Home
Bathing, comforting, rocking babies/toddlers	Mothers	Various men in the village	Models	Observes, imitates	Around the home
Social					
Interacting with other children (Older siblings caring for younger ones)	Older siblings	Younger siblings	Expected participation	Experiences, absorbs	Home & village
Children playing together	Older children	Younger children	Models, expects participation	Participates, observes, imitates	Home & village
Interacting with other adults	Older generation	Younger generation	Passive inclusion	Participates	Home & village

Traditional Medical Skills

Whilst in the past all ailments would have been treated with traditional remedies, usually using flora from the forest, the introduction of modern medical facilities has caused that to change. Nevertheless, many of the women and men still retain the knowledge of traditional herbal remedies and all the women I spoke to in One Ox village knew some. When a European visitor sprained a knee badly during one of my visits in November 2008, leaves, heated over an oil lamp, were applied to the injured part. Even with the presence in the village of a modern trained medical auxiliary running a simple clinic, these remedies were still much in evidence and were being handed down by word of mouth from generation to generation (Table 25).

Table 25 Traditional medical skills - One Ox Village

Skill	Teacher	Learner	Method of Teacher	Method of Learner	Teaching/Learning Location
Using traditional remedies (knowing which plants and what to do with them)	Mama Lena's mother; Mama Lena	Mama Lena; Mama Lena's children	Displays visually, instructs	Observes, listens	Around home
	Mama Yanti's parents; Mama Yanti	Mama Yanti; Mama Yanti's children	Displays visually, instructs	Observes, listens	Around home
	Mama Ray's parents, friends, husband and in-laws; Mama Ray	Mama Ray; Mama Ray's children	Displays visually, instructs	Observes, listens	Around home

The people I spoke to in Hilltop village where there is a small local hospital, said initially that they now preferred to go to the doctor or hospital for medicines if they were ill. However, on further questioning it transpired that Ibu Dani, Ibu Laura and Ibu Wilson all knew of and still used traditional remedies for certain ailments and were keen to pass them on to their children as they considered them to be very effective.

In Rainbow village Nova's mother had been taught by her mother to use the bark of the cashew nut tree, boiled and the water then drunk as a cure for bleeding from the bowels. This had been given to her children and they were cured. They in turn now know about the remedy. However, when Nova was diagnosed with an appendicitis she refused the bitter water from the bark of the *sintuk* tree, that her mother offered her, preferring to take modern medicines from the pharmacy, but apparently only because of the extreme

bitterness of the water, not because she doubted its efficacy. She also explained that the young people today do not know any more where to get these remedies as they are generally only found deep in the forest.

The traditional midwife is also still in demand in all three villages although in Hilltop village the hospital trained midwives were the preferred option. In One Ox and Rainbow they were still used but less frequently than in the past as an increasing number of the young people were preferring to have their babies at hospitals in the cities. Indu Joni's seven-months pregnant daughter said:

The traditional midwives are old and forget. They don't use sterile instruments. Modern midwives in hospital are much better.

Nevertheless in Rainbow village the traditional midwife, Indu Daisy was thought to be in her seventies and was training her daughter now in her fifties, to continue the role (see Table 26). I was told that the daughter is still unable to attend a birth on her own but always has the guidance of her mother with her.

Table 26 Traditional medical skills – Rainbow Village

Skill	Teacher	Learner	Method of Teacher	Method of Learner	Learning Location
Traditional midwifery skills	Indu Daisy	Indu Daisy's daughter, Daisy	Passive inclusion, models/ demonstrates	Observes, practises	Homes of women giving birth

Recreational

Work is hard for the Ngaju Dayak people and there is little time for recreation in their lives although before the days of electricity, once darkness had fallen at around 5.30 p.m. not much more work could be done. So after the evening rice meal the family would sit around and talk and tell stories. With the coming of electricity and of television, traditional story telling has now largely been replaced by watching television as the main form of entertainment in the villages.

Every village still has its volley-ball court and every afternoon, weather permitting, young people can be seen playing. In the past the men, women and children all played volley-ball regularly in Rainbow village but the deterioration of the court meant that now only a few of the young men play in the neighbouring village. Badminton, Indonesia's national sport, is still played in the village, undoubtedly encouraged by the frequent televising of international matches.

The age-old practice of chewing betel-nut still continues today and is enjoyed by the older women and is being passed on to the younger ones, including some who have been educated out of the village in the towns and cities, although fewer younger women were seen to be participating (see Tables 27, 28, and 29).

Table 27 Recreational skills – Hilltop Village

Skill	Teacher	Learner	Method of Teacher	Method of Learner	Teaching/ Learning location
Chewing betel nut	Grandma, Ibu Dani	Grandchild	Models, invites participation	Observes, participates	Home
Volley-ball	Older children/ young people	Children	Models	Observes, participates	District playing fields

Table 28 Recreational skills– One Ox Village

Skill	Teacher	Learner	Method of Teacher	Method of Learner	Teaching/ Learning Location
Chewing betel nut	Grandmothers/ older generation	Younger women	Models	Observes, imitation	Home
Volleyball	'Older' young people	Children and young people	Models	Observes, participates	Volley-ball court

Table 29 Recreational skills – Rainbow Village

Skill	Teacher	Learner	Method of Teacher	Method of Learner	Teaching/ Learning Location
Badminton	Older young people/TV	Children & Young people	Models	Observes, participates	Village
Chewing betel nut	Older women	Younger women	Models	Observes, imitation	Homes

Communication and Numeracy Skills

From time immemorial, information has been passed on orally through stories that have been passed down by the older generation to the younger as the family gathered in the home or forest hut, after dark and without electricity, and sat around and talked. Some forms of counting and simple calculating would have taken place in the context of the working and living environment. Reading and writing however, are not traditional skills of Ngaju Dayak people. Theirs was an oral society where information was mainly passed on by word of mouth and was remembered rather than written. With the coming of Christianity that began to change and the New Testament section of the Bible was

translated by the early missionaries into the Dayak Ngaju language as early as 1846 with the complete Bible being published in 1858. All the women who took part in the interviews and who were observed had had some basic education around the time of Indonesia's independence from the Dutch. Even though some had not completed primary education and few had continued beyond, they had been taught to read and write and do simple arithmetic. With the progress of formal education, the younger generation are all now being taught to be literate and numerate through the school system, but for the older generation of women, whom I observed and interviewed, reading was no longer a major means of communication and writing even less so. When Indu Helen from Rainbow Village, quoted at the beginning of this thesis, was asked to write, as a part of a local government initiated farming course for local village people, she was mortified as she told me she probably hadn't held a pen for twenty years. Furthermore when the women were asked how they would prefer to learn the Bible stories they claimed they did not know, their replies indicated a preferred learning style that was predominately visual, auditory and kinaesthetic, although there were women who said that they would like to read them. Mama Lena in One Ox village said she would prefer:

to read them or listen to a cassette or a CD. A VCD is even better. We once showed the story of Moses on a VCD and the house was full when we put it on. Everyone wanted to watch it. Drama would be good too because we all enjoy the TV dramas [soap operas].

Story telling

Table 30 Story telling – Hilltop Village

Skill	Teacher	Learner	Method of Teacher	Method of Learner	Teaching/ Learning location
Traditional story-telling	Mother	Sons	Memorises, repeats, recites	Listens, memorises	At night in the huts in the fields with no electricity/TV
Traditional story-telling	Primary School teacher	Primary school pupils	Reads tells stories	Listens, memorises	State Primary School
Traditional story-telling	Grandmother	Grand-daughter, then aged 7-8	Memorises, repeats, recites	Listens, memorises	At night in Grandma's house
Story-telling	School text-books	Primary school pupils	Encourages reading	Reads	Primary school
Story-telling	5 year old Diana	Same age/ younger friends	Tells stories	Listens	Home

Table 31 Story telling – Rainbow Village

Skill	Teacher	Learner	Method of Teacher	Method of Learner	Teaching/ Learning Location
Telling traditional stories in bed before going to sleep	Grandma, Indu Nova	5 yr old Grand daughter Bella	Tells stories	Listens, memorises	Home
Telling traditional stories and Bible stories	Indu Ana	Children when small	Tells stories	Listens, memorises	Home

Literacy and numeracy skills

Taken overall (see Tables 32, 33, 34) the school teacher was the main deliverer of literacy and numeracy skills in all three villages.

Table 32 Literacy and numeracy skills - Hilltop Village

Skill	Teacher	Learner	Method of Teacher	Method of Learner	Teaching/ Learning location
Mathematics, simple addition	School teacher Ibu Rensi	Year 1 Primary children	Writes examples, instructs, demonstrates, repeats, uses question and answer, slightly ridicules, rewards*	Observes, listens, practises	Primary School classroom
Teaching Primary School	University staff	Ibu Rensi	Follows Western style formal education teacher training course	Listens, completes assignments, some practical work	University & school classrooms
Reading	School teachers & Parents	Ibu Rensi	Formal instruction (phonic method)	Listens, imitates	School & home
Writing	School teachers	Ibu Rensi	Formal instruction (examples on board)	Observes, practises, copying	School
Reading	School teachers	Ibu Wilson	Formal instruction (phonic method)	Observes imitates	School
Reading	Ibu Wilson's mother	Ibu Wilson and brothers and sisters	Taught at home before going to school – method not explained	Learnt from mother – method not explained	Home
Number	Ibu Wilson's mother	Ibu Wilson and brothers and sisters	Taught at home before going to school – method not explained	Learnt from mother – method not explained	Home
Writing	Ibu Wilson's mother	Ibu Wilson and brothers and sisters	Taught at home before going to school – method not explained	Learnt from mother – method not explained	Home
Writing	School teacher	Ibu Wilson	Demonstrates and gives tasks	Copies, practises	School

* Longer playtime if quicker, 'punished' with shorter/no playtime if slow.

Table 33 Literacy and numeracy skills – One Ox Village

Skill	Teacher	Learner	Method of Teacher	Method of Learner	Teaching/ Learning Location
Reading	School teachers	Mama Lena's 4 sons, 2 daughters	Formal instruction (phonic method)	Listens, imitates, practises	School
Writing	School teachers	Mama Lena's 4 sons, 2 daughters	Formal instruction	Observed, practises	School
Reading	School teachers	Future children of Mandy	Formal instruction phonic method	Listens, imitates, practises	School
Writing	School teachers	Future children of Mandy	Formal instruction	Observes, practises	School
Counting	School teachers	Future children of Mandy	Formal instruction	Observes, practises	School
Christian Education	School teachers/ Sunday School teachers.	Mama Lena's 4 sons, 2 daughters	Formal Instruction	Listens	School & Church
Learning numbers etc	Parents, mothers and fathers	Children	Displays visual aids (educational posters)	Observes, listens, imitates	Home
Christian education	Sunday School teacher	Children of Christian parents at Sunday School	Semi-formal instruction, reads, tells stories, instructs, demonstrates	Observes, listens	Church

Parents and 'significant others' were still involved and the example overleaf from Rainbow village (Table 34) illustrates the range of types of teacher and the variety of teaching and learning methods currently in operation.

Table 34 Literary and numeracy skills – Rainbow Village

Skill	Teacher	Learner	Method of Teacher	Method of Learner	Teaching/ Learning Location
Writing (as elections secretary)	Mother-Indu Ana	Indu Ana's children	Models	Observes, imitates	Home
Writing	Mother-Indu Bella & Aunt-Nova	Daughter & niece, Bella	Models	Observes, imitates	Home
Accounting (as Church treasurer)	Mother-Indu Ana	Indu Ana's children	Models	Observes, imitates	Home/church
Counting/ (calculating price of rubber and fish)	Mother – Indu Helen	Indu Helen's children	Demonstrates	Observes, imitates	Around the home/riverside
Counting/ calculating (price of fish)	Mother-Indu Joni	Indu Joni's children	Models	Observes, imitates	Around the home/riverside
Reading (sub-titles on TV)	TV	Mother – Indu Joni & children	Displayed (on screen)	Reads	Home
Reading	School teacher	Primary school children	Formal instruction (phonic methods)	Listens, imitates	School
Writing	School teacher	Primary school children	Formal instruction (writes examples on board)	Observes, imitates, writes	School
Counting	School teacher	Primary school children	Formal instruction (writes examples on board)	Copies, solves problems	School

It had been suggested that in this era of mobile phones, texting might be a way in which the village people were now using their writing skills. However, of the four women interviewed in Rainbow Village ranging in age from 39 – 59 years, only one knew how to access text messages and none were able to send texts. All but one owned a mobile phone but used them to make phone calls to keep in contact with family and friends outside of the village. The young people used mobiles constantly for sending and receiving texts as well as for phone calls.

The government is seeking to ensure that all pupils have access to and receive a minimum of nine years, free education. Increasingly young people are continuing for an additional three years, making a total of twelve, followed by further or higher education. In

such a situation the move to more and more skills being taught formally is understandable.

A few of the younger and middle-aged parents in One Ox village had gone on to some form of higher education and seemed to value formal education more highly. Generally parents saw the school as the place for the children to learn the formal skills of reading, writing and number. Some, like Mama Lena valued it as 'you need to read and write if you are not going to be deceived.' By this she meant that if they could read and write and were numerate people would not be able to cheat them, for example in business. However, she also admitted that her children 'don't want to learn at home.' Mandy likewise, although not yet having any children, saw the school as the place to learn the basic skills.

Church Related Skills

For many centuries the Ngaju Dayak have been organising their own affairs and women have been involved. At a crucial meeting of the Dayak people held at Tumbang Anoi in 1894 (LMMDD-KT 2001) women were present, though few in number. The main protestant Christian denomination has involved women in the church women's organisation since 1930 (Ukur 2000) and women are involved as leaders (Elders) in all of the congregations.

In Hilltop Village, many skills used in Christian worship were observed still being passed on informally as in Table 35. I was told though that increasingly the governing body of the denomination, the synod, arranges training sessions for the leaders and Sunday School teachers.

Table 35 Church related skills – Hilltop Village

Skill	Teacher	Learner	Method of Teacher	Method of Learner	Teaching/ Learning Location
Singing	Sunday School Teachers i.e. Elders in Christian community	Children of Christian parents	Models, repeats	Listens, repeats, practises, rote learns, performs	Church
Singing	Trainee Christian Minister of Religion	Young People of the Church	Invites participation, models, repeats	Listens, imitates, repeats, practises, rote learns performs	Church
Singing	Elder in Christian congregation	Ladies of the Church	Models, instructs (in tonic-sol-fa music)	Repeats practises reads music (tonic-sol-fa) performs	A local home
Praying	Sunday School Teachers i.e. Elders in Christian community	Children of Christian parents	Writes, instructs (writes example prayers)	Rote learns, reads	Church
Praying	Trainee Christian Minister of Religion	Children of Christian parents	Verbal instruction (prays aloud)	Repeats	Church
Organising Women's Christmas service & celebration	Older women in the community	Younger women	Models	Participates, experiments	Home & Church
Leading Christian Worship	Trainee Christian Minister of Religion	Young People of the Church	Models/ demonstrates instructs, invites participation	Practises, participates, imitates, (adapting adult services)	Church

Table 36 Church related skills – One Ox Village

Skill	Teacher	Learner	Method of Teacher	Method of Learner	Teaching/ Learning Location
Arranging Church worship services	Synod, ordained Minister, experienced Elders	Lay Elders	Semi-formal instruction, demonstrates, models	Observes, listens, imitates	Village Church, Synod centre in city
Leading/taking part in leading Church worship	Synod, ordained Minister, experienced Elders	Lay Elders	Models, demonstrates	Observes, listens, imitates	Village Church
Financial management of Church	Synod, ordained Minister, experienced Elders	Lay Elders	Verbal instruction (of written accounts)	Observes, listens, imitates	Village Church/home
Arranging Women's meeting	More experienced women with some authority	Women Elders and non-Elders	Models	Observes, listens, imitates	Village Church
Singing in worship	Older generation	Younger generation	Models, Models	Listens, participates	Village Church/home

In practice much passing on of these skills takes place informally as the new generation sees the example of the previous one. There is, however, semi-formal instruction given by the Synod of the Church based in the provincial capitals. This usually takes the form of meetings in the city to which delegates from the village are sent. Occasionally more local training sessions are arranged.

In Rainbow village (see Table 37) many of the skills associated with Christian worship are learnt informally as the children or new members join in and imitate the older members. There is also some semi-formal training given both to new members in the form of catechism classes and training for Elders and Sunday School teachers, which are held at the 'Mother Church' in the provincial capital.

Table 37 Church related skills – Rainbow Village

Skill	Teacher	Learner	Method of Teacher	Method of Learner	Teaching/ Learning Location
Hymn-singing	Older members of Congregation	Younger members of congregation	Models	Listens, participates	Church/Home
Leading parts of worship	Church Leaders More experienced Elders	Church Elders	Some semi-formal training courses. models, demonstrates	Participates, listens, writes, memorises observes	Church in town. Local Church
Praying	Church Leaders More experienced Elders, written liturgies	Church Elders	Models, instructs	Listens, reads	Local Church
Keeping financial records	Church Leaders More experienced Elders	Church Elders	Some semi-formal training courses. models, demonstrates	Participates, listens, writes, memorises, observes	Church in town. Local Church
Teaching Sunday School, Singing, praying	Older teenagers	Children of Christian parents	Semi-formal teaching, tells stories, models sings, prays	Listens, participates, repeats	Church
Teaching Bible stories	Older teenagers/ Professional Minister/teacher	Children of Christian parents. Adults at House Meetings/ser vices	Tells stories, shows pictures, question and answer	Listens, observes, participates	Church

This concludes the tables presenting the methods of passing on the skills. The tables recording how beliefs were being passed on are recorded in the following chapter.

Chapter 6

BELIEFS RESULTS: HOW BELIEFS ARE BEING PASSED ON

Four key beliefs areas were selected for study, as explained in the methodology section.

They were beliefs concerned with:

1. Pregnancy and birth
2. Death, burial and the after-life
3. Spirits, omens and other supernatural phenomena
4. Ensuring subsistence

Pregnancy and Birth

A total of nine of the women participants from the three villages were interviewed about their beliefs regarding pregnancy and childbirth. They were: Ibu Laura, Ibu Wilson and Ibu Dani from Hilltop village, Mama Wona, Mama Edwin and Mama Lena from One Ox village and Indu Joni, Indu Helen and Indu Ana from Rainbow village. This produced a large amount of data which further content analysis revealed could be arranged and tabulated under the following ten sub headings:

- Foods forbidden to pregnant mothers and fathers.
- The manner of eating.
- Beliefs connected with chopping or cutting.
- Keeping the baby small.
- Ensuring a smooth birth and healthy baby.
- Maintaining the health of the mother.
- Health of the baby after the birth.
- Treatment of the placenta.
- The supernatural, vampires and magic.
- Thanking the traditional midwife and naming the child.

How Beliefs About Pregnancy and Birth are Being Passed On

As the main aim of the research was to discover the ways in which these beliefs were being passed on to the next generation and because of the large amount of data collected, the complete set of tables were re-examined and one indicative example from each of the groups of beliefs above, from each of the villages in turn has been selected to illustrate the way in which that particular belief was being passed on. The villages were selected in rotation. The tables follow the same pattern as in the skills section in chapter 5, i.e.

showing the belief and how it is passed on, with some discussion in this chapter and with more detailed discussion in chapters 8 and 9.

Taboos were common, i.e. things that were forbidden by custom and the breaking of which would certainly cause harm either to the individual who broke the taboo or to the wider community. In the case of pregnancy and birth, taboos were imposed because of the belief that the foetus can be adversely affected by the mother's, and sometimes the father's, outward behaviour.

Foods forbidden to pregnant mothers and fathers

The women in all three villages related taboos concerning foods which were forbidden to pregnant mothers and sometimes fathers. This can be seen in the tables below.

Table 38 Foods forbidden to pregnant mothers and fathers - One Ox Village

Belief	Teacher	Learner	Method of teacher	Method of learner	Teaching/ Learning location
e.g. banana flower that looks like a bud, as baby will stay 'closed' like bud and not come out	Older women, grandmother, mother	Daughter when pregnant (Mama Wona) Mama Wona's daughter, Wona when pregnant	Imposes taboo, plus stories of the experiences of older generation, orally transmitted	Listens, carries out instructions, memorises	Home

The women also explained about taboos that were concerned with the manner of eating, which was also believed to adversely affect the foetus.

The manner of eating and chopping

Table 39 The manner of eating – Hilltop village

Belief	Teacher	Learner	Method of teacher	Method of learner	Teaching/ Learning location
Must not eat rice directly from saucepan or will harm foetus	Older women, grandmother, mother	Younger pregnant women Ibu Dani	Imposes taboo, plus stories of the experiences of older generation, orally transmitted	Listens, carries out instructions, memorises.	Home

There were a variety of beliefs connected with chopping or cutting.

Table 40 Chopping and cutting – Rainbow Village

Belief	Teacher	Learner	Method of teacher	Method of learner	Teaching/ Learning location
Neither husband nor wife may chop wood or baby will have a hare lip	Indu Joni's mother, older generation	Indu Joni	Imposes taboo, plus stories of the experiences of older generation, orally transmitted	Listens, carries out instructions, memorises.	Home

Given the world view of the Ngaju Dayak people where this world mirrors the 'Upper' (unseen) world, and actions in the 'seen' world have their counterparts in the 'unseen', many of these taboos contain a certain logic.

The same belief in the 'mirroring' of actions in the 'seen' world which somehow affect the unborn child, is again seen in the story Mama Lena related to me. She explained how she had been pregnant a number of years ago with one of her sons. During her pregnancy her husband played almost daily with a small boy with a hare-lip, denoting a cleft palette, who came regularly to the house. They got on really well. When Mama Lena's baby was born he had an identical hare-lip. The conclusion was drawn that the husband's behaviour during his wife's pregnancy had influenced the unborn foetus.

Keeping the baby small

Another group of beliefs were concerned with keeping the baby small. All three villages had beliefs of this kind but the details were often different. The example below is from One Ox village

Table 41 Keeping the baby small – One Ox Village

Belief	Teacher	Learner	Method of teacher	Method of learner	Teaching/ Learning location
Chewing certain roots can ensure baby remains small and can easily come out.	Older women, grandmother, mother	Daughter when pregnant (Mama Wona) Mama Wona's daughter, Wona, when pregnant	Stories of the experiences of older generation, orally transmitted	Listens, carries out instructions, memorises.	Home

Ensuring a smooth birth

With modern medical facilities still being very limited it is understandable that much attention is paid to ensuring that the baby will be healthy and will have a smooth and relatively easy birth. To enable this to happen it is desirable that the foetus should not be too large and especially that the head will not be too big. The process of chewing certain roots to keep the baby small was very common. It can be reversed after birth by putting the same roots into the baby's bath water. The following conversation is taken from an electronically recorded interview with Mama Wona talking about her daughter:

When she has given birth the roots used for keeping the foetus small 'paringkes' that we talked about earlier, yah, we take it again and put it in the baby's bath water so that this, yah..., so that what we did earlier can return and the baby is fat.

Other beliefs, shared by all the informants, were concerned with enabling the baby to come out smoothly and be healthy.

Table 42 Ensuring a smooth birth and a healthy baby – Hilltop Village

Belief	Teacher	Learner	Method of teacher	Method of learner	Teaching/ Learning location
Washing one's hair with certain leaves will ensure a smooth birth	Older women, grandmother, mother	Younger pregnant women Ibu Wilson	Stories of the experiences of older generation, orally transmitted	Listens, carries out instructions, memorises	Home

Maintaining the mother's health

Ensuring the health of the mother was a reason for carrying out a number of other activities during pregnancy. An example from Rainbow village is given:

Table 43 The health of the mother – Rainbow Village

Belief	Teacher	Learner	Method of teacher	Method of learner	Teaching/ Learning location
Mustn't eat any fungus or certain kinds of fish after giving birth or will cause bleeding	Experience	Indu Helen	Taboo, plus stories of the experiences of older generation, orally transmitted	Listens, carries out instructions, memorises	Home

Keeping the baby healthy after birth

Concern for the health of the baby after it had been born was the reason for another set of beliefs:

Table 44 Health of the baby after the birth – One Ox

Belief	Teacher	Learner	Method of teacher	Method of learner	Teaching/ Learning location
Husband must arrange a 7 month ceremony for first pregnancy to ensure health of the baby	Older women, grandmother, mother	Daughter when pregnant (Mama Wona) Mama Wona's daughter, Wona, when pregnant	Instruction plus stories of the experiences of older generation, orally transmitted	Listens, carries out instructions, memorises	Home

Treatment of the placenta

Other beliefs surrounded the treatment of the placenta after the birth.

Table 45 Treatment of the placenta - Hilltop

Belief	Teacher	Learner	Method of teacher	Method of learner	Teaching/ Learning location
After-birth is the brother/sister of the new-born and must be properly treated or baby will be affected	Older women, grandmother, mother – Ibu Wilson's parent's & in-laws	Younger pregnant women Ibu Wilson	Stories of the experiences of older generation, orally transmitted	Listens, carries out instructions, memorises	Home

Beliefs in the supernatural and in vampires and magic

Beliefs in the supernatural and in vampires and magic were very prevalent.

Table 46 The supernatural, vampires and magic – Rainbow Village

Belief	Teacher	Learner	Method of teacher	Method of learner	Teaching/ Learning location
Vampires can possess people and cause the death of either the mother or the baby	Older generation	Indu Joni	Stories of the experiences of older generation, orally transmitted	Listens, carries out instructions, memorises.	Home

Although not part of their Christian belief system, the belief in ghosts, spirits and malevolent beings remains strong. Mama Edwin, was adamant that one did not need to fear the vampires, but clearly believed in their existence.

When I gave birth I had special 'ilmu' [knowledge] from the ancestors to protect myself from the 'hantuen' [a vampire or part-human creature that can fly leaving it's body behind apart from the head]. To do this you take a few grains of rice in your fist and take your fist up to your mouth [she demonstrates] and then you recite to the rice [a mantra that has been handed down from the ancestors] You scatter the rice around your body as you are sitting.

She explained that this was before she converted to Christianity and that she no longer believed in the 'ilmu'. Nevertheless three of her eight children had been given the formula even though they all professed to follow the Christian religion. In reply to why those three had been given it and not the others she replied that it was given to those who asked and who wanted it. Here she shrugged and said she didn't consider it very important which was why she only passed it on to those who specifically asked to have it. So when her daughters had asked their father for the secret formula he had told them and they had used it.

Thanking the traditional midwife and naming the child

In the past the ceremonies of thanking the traditional midwife who had attended at the birth and naming the child took place at the same time. Whilst now, with many younger people giving birth in hospitals in the cities, the services of the traditional mid wife are called upon less, the naming of the child is often done by the parents themselves without any particular ceremony. In each village, however, they related to me how these things used to be done traditionally and still are on occasions.

Table 47 Thanking the traditional midwife and naming the child – One Ox Village

Belief	Teacher	Learner	Method of teacher	Method of learner	Teaching/ Learning location
Rice represents the spirit of the child in naming ceremony. 3 people write names – baby chooses one	Older generation	Mama Wona	Instructions plus stories of the experiences of older generation, orally transmitted	Listens, carries out instructions, memorises	Home

In Rainbow village, although Indu Joni's eldest daughter had given birth in the modern hospital in the city and that the second daughter was about to do the same, they had still carried out most of the above ceremonies prior to the birth.

Although there is a range and diversity of beliefs concerned with pregnancy and birth the fourth and fifth columns in all the tables is very similar. The ways in which these beliefs were being passed on to the next generation was almost invariably the same. The pattern that was followed was that of the pregnant mother listening to and hearing stories and anecdotes surrounding pregnancy and birth from her grandmother, mother, aunts and sometimes fathers and uncles, as in Rainbow when the husbands of two of my participants frequently added comments during interviews about pregnancy and birth beliefs. These beliefs had been taught by the grandparents who had passed them on to their children and they were now passing them on to their children. The beliefs, which always involved some sort of action or avoidance, on the part of the recipient, were then carried out or avoided by the pregnant mother and committed to memory. Later they were, or will be, passed on to the subsequent generation.

Death, Burial and the After-Life

Eight women from the three villages were interviewed about their beliefs regarding death, burial and the after-life. They were Mama Wona and Mama Ray in One Ox village, Indu Dani, Ibu Wilson and Ibu Ana, Ibu Helen and Ibu Joni in Rainbow village.

Also thirteen observations of death related ceremonies took place and various informal conversations. The data that this produced was subjected to content analysis and the results were arranged under the following sub headings:

- Keeping vigil over dead bodies
- Death as a 'mirror image' of life
- Natural phenomenon connected with death
- Beliefs about the spirit of deceased
- 'Christian' beliefs concerning the after-life
- Other beliefs associated with death

How Beliefs About Death, Burial And The After-Life Are Being Passed On

As in the previous section, the aim was to discover the ways in which these beliefs were being passed on to the next generation and so the complete set of tables relating to beliefs about death, burial and the after-life were re-examined and one table from each of the groups of beliefs above, from each of the villages in turn was selected to illustrate the way in which that particular belief was being passed on. The villages were usually selected in rotation, with the addition of one extra entry from One Ox, explained in the text. The results can be seen in the following pages.

Keeping vigil over dead bodies

The practise of keeping vigil over the body of the deceased from the time of death, or recovery of the corpse, until the burial, is common in Central Kalimantan.

Table 48 Keeping vigil over dead bodies – One Ox Village

Belief	Teacher	Learner	Method of teacher	Method of learner	Teaching/ learning location
Bodies of deceased never left alone before burial always guarded by family members or sickness will befall the family	Older generation	Mama Wona & her children Mama Ray & her children	Models	Observes participates, remembers, imitates	Home of deceased
Must stay awake so men play games with lighted 'footballs'	Mama Ray	Mama Ray's children	Models	Observes, participates, remembers, imitates	Home of deceased

The belief that the body must not be left unattended is strong. Mama Wona explained to me, 'He/she is always kept company by a family member who mustn't sleep.' When asked how they would feel if they fell asleep she replied, 'You feel you have done wrong.'

Keeping vigil over the bodies has always been done by the Ngaju Dayak people and the children, who are present at all ceremonies, absorb what is going on. With the absence of set 'bed-times' for children it is possible for them to observe throughout the night or until they fall asleep.

The playing 'football' with a ball of fire is part of the ritual to ensure that the men don't fall asleep, associated with the traditional religious beliefs. Wona's husband assured me that this was a thing of the past but a matter of days after that conversation I heard that it had been played during the vigil for a relative of his and he had joined in. The custom would appear to still be alive in One Ox village, even among the Christians who claim to have left it behind.

Death as a 'mirror image' of life

At every funeral that I observed, bags of clothing, tools or toys or other possessions were always placed in the grave along with the coffin. This would seem to be because although the Christians usually didn't articulate the belief, there was a strong residue from the Hindu-Kaharingan religion which, in accordance with the Ngaju Dayak worldview, sees death as a 'mirror image' of life.

Table 49 Dead buried with earthly possessions – Hilltop Village

Belief	Teacher	Learner	Method of teacher	Method of learner	Teaching/ learning location
After-life mirrors earthly life. Need possessions, so buried with them	Family of deceased, Ibu Pat & Del	All ages, (including at least 18 children)	Models, enacts visual aid	Observes, participates, remembers, imitates	Graveside
Light needed by deceased and/or relatives	Family of deceased Del	All ages	Models, enacts visual aid	Observes, participates, remembers, imitates	Graveside

Reflecting the Dayak world view where the 'Upper World' is another version of this world, the natural assumption is that material possessions are also needed in the next life. It is not a naïve belief that somehow the goods buried will reach the 'Upper World' but that what is

done here on earth will be mirrored in the other world and therefore the necessary possessions will be provided.

When questioning the women about why the Christians continued the custom of burying earthly possessions with the dead, I received a variety of answers. Some claimed they no longer did it as it wasn't necessary but most continued it because it was 'tradition' claiming they didn't know why or really understand it.

The grave is also shielded from the sun, usually by an umbrella, and candles are lit at the grave-side (see Table 49). The reasons for this were varied. Again 'tradition' was the normal first answer that I received followed by 'out of respect for the deceased'. The assumption, whether acknowledged by the women or not, was that somehow these actions would have an affect on the deceased.

Respect or love for one's parents is also a very strong motive. When asking Mama Ray about why money is sometimes put in the coffin she replied:

Maybe it's, what is it? Pouring out our hearts. I think it's from the love people have for the deceased. That's it! You don't have to.

Another strong motivating factor is that of 'not loosing face' with the family by not being seen to carry out all the traditions and rituals and therefore be thought to not be paying due respect to the parents/older relatives. Peer group pressure in this, in the form of the extended family, is very strong. When Mama Wona was asked about how she would feel if she didn't move the bones of her deceased father to unite them with her deceased mother's bones, she replied, 'I should be afraid that I was doing wrong.' When pressed further as to who or what would make her feel that she was doing wrong she replied, 'the rest of the family who are still living.'

The assumption that the deceased still has material needs is reinforced by the belief that they can communicate with the living through dreams. The following discussion took place with Mama Ray:

... But I've heard, there's a story about Mama Daisy. It's said there, who died the other day – she was of the Kaharingan religion, then when she was baptised and became a Christian, it wasn't a month before she died. She was buried in Palangka Raya then people here dreamt. They said they met with her. She said, "Aduh! My house is leaking", she said to her friends. The hut it seems was falling down.

When asked what the dream meant she replied:

What it meant was, perhaps because her grave didn't have a roof. It hadn't been cleaned. Like that. That's their understanding.

Stories like this are circulated in all of the villages by the older people and passed on to, and by, the younger ones, all by word of mouth.

Natural phenomenon connected with death

Another common belief is that natural phenomena such as rain or thunder, have a connection with the death that has just taken place. Within a world view that sees all of nature as inter-related and inter-dependent this idea is quite compatible.

Table 50 Natural phenomenon connected with death – Rainbow Village

Belief	Teacher	Learner	Method of teacher	Method of learner	Teaching/ learning location
Thunder & lightning after death means the deceased are being welcomed joyfully by those who've gone before	Indu & Bpk Joni's parents Indu Helen's parents & grandparents	Indu, Bpk Joni Indu Helen	Tells stories orally	Listens, remembers	Home
Rain or thunder after someone has died means they are crying for the family	Indu Ana's parents & grandparents Other people	Indu Ana Indu Helen	Tells stories orally	Listens, remembers	Home
Rain at burial is good for relatives – will 'cool them down' so they don't get sick	Indu Helen's parents & grandparents	Indu Helen	Tells stories orally	Listens, remembers	Home/ village
Water rising and flooding as burial begins is a good sign for the relatives – will prosper	Indu Helen's parents & grandparents	Indu Helen	Tells stories orally	Listens, remembers	Home/ village

Following the death of someone in One Ox village it poured with rain. I was assured that raining the night after a death means the deceased is crying and also that no misfortune will come to the family.

These stories or beliefs are passed on orally by the parents to the children as part of everyday conversation.

Beliefs about the spirit of deceased

There is much fear surrounding graveyards and people will often avoid them especially at night believing that ghosts or spirits inhabit these places. The stories tabulated below from One Ox village illustrate some of these ideas.

Table 51 Beliefs about the spirit of deceased – One Ox Village

Belief	Teacher	Learner	Method of teacher	Method of learner	Teaching/ learning location
Spirit can return to trouble relatives therefore have to confuse it by breaking a glass/pot on doorstep after the coffin leaves the house	Older generation	Younger generation Mama Ray	Models	Observes, remembers	Home
Spirit 'wanders' for 40 days before ascending to heaven – 'like Jesus'	Parents. Elders Mama Wona	Younger generation Mama Wona's children	Tells stories orally	Listens, remembers	Home
Foot steps can be seen	Mama Wona's experience interpreted in light of popular belief	Mama Wona's children		Listens, observes, remembers	

Stories are believed and passed on from generation to generation. Parent's will interpret what they see in the light of the traditions and the stories and beliefs that have been passed on to them.

When Mama Wona was asked about where she thought the spirit of the deceased was for the forty days between burial and the forty day ceremony, she replied she didn't know. 'We don't think about that.' But Nore, my Ngaju Dayak assistant, immediately gave the answer she had had passed down to her, i.e. that the 'spirit is going backwards and forwards. The forty day ceremony settles it.' Mama Wona also told me the following story:

When my father died, after the burial, the night after, we put ash from the cooking fire into a flat winnowing tray and put it outside the front door. In the morning there was a left footprint in the ash. It was our father's footprint.

When asked how they knew it was his she replied:

It couldn't have been anyone else's because we put the ash out very late at night and we know the characteristics of our father's foot. It was small.

This story was passed on to me as we sat on the floor of her house with her children present hearing and not questioning the story having undoubtedly heard it many times before.

'Christian' beliefs concerning the after-life

Whilst it was not possible to observe these beliefs, they were taught at the Christian religious services connected with the deaths and burials of the village people, particularly in Hilltop where there was a resident Christian minister. They were also confirmed in the interviews I had with the women.

Table 52 'Christian' beliefs concerning the after-life – Hilltop Village

Belief	Teacher	Learner	Method of teacher	Method of learner	Teaching/ learning location
Life after death	Christian trainee-Minister	All family – all ages Including children	Preaches, reads the Bible, explains	Listens, participates in ceremony	Home of the dying
Death is not the end & is part of God's plan	Minster	All family – all ages Including children	Preaches, reads the Bible, explains	Listens, participates in ceremony	Home of deceased
Resurrection of the dead	Minster	All family – all ages Including children	Preaches, reads the Bible, explains	Listens, participates in ceremony	Home of deceased
Existence of heaven & God's eternal presence	Christian hymnology	All family – all ages Including children	sings hymns	Participates in singing hymns	Graveside
Resurrection of the dead	Minster	All family – all ages Including children	Preaches, reads the Bible, explains	Listens, participate in ceremony	Home of deceased and graveside
Life after death in God's presence. Effectiveness of prayer	Older Christians Mother - Minister	5yr old Minister's daughter	Models (need to pray for dead - Wanted to pray for 3yr old who had drowned)	Observes, listens	Home, Graveside
Life after death, resurrection of the body (Christian burial)	Minister, family of deceased	All ages, including at least 18 children	Preaches, reads the Bible, explains	Listens, observes	Graveside

Another facet of beliefs concerning the after-life was the practice of 'Christian' secondary mortuary ceremonies carried out by some Christian people. Secondary mortuary ceremonies, strictly speaking, are not part of the Ngaju Dayak Christian tradition unless the body of the deceased has to be moved for some reason, from one location to another. However, relatives of Indu Wona's in the village next to One Ox had carried out such a ceremony just prior to one of my visits. A more common practice was for the graves of the departed to be cleaned, tiled, and given roofs in the traditional Dayak house style, using *sirap* which are hardwood roofing tiles cut into the shape of a shield and placed

overlapping on the high, steep sided house roofs. A thanksgiving service and celebration usually followed this.

Table 53 'Christian' secondary mortuary ceremonies – One Ox Village

Belief	Teacher	Learner	Method of teacher	Method of learner	Teaching/ learning location
Need for semi-Christianised secondary mortuary ceremonies (Pemugarang kubur)	Older generation	Younger generation Mama Wona Mama Ray	Instructions of older generation orally transmitted and modelled	Observes, listens, remembers, imitates	Home, cemetery

Here it would seem that a ceremony from the traditional religion has been substituted for a Christian equivalent in order fulfil filial obligations which are very strong.

Other associated beliefs

Table 54 Other beliefs associated with death – Rainbow Village

Belief	Teacher	Learner	Method of teacher	Method of learner	Teaching/ learning location
Body must leave the house feet first (and enter head first) so he/she can't see the other people	Indu Joni's parents and past generations	Indu Joni	Instructions of older generation orally transmitted and modelled	Observes, listens, remembers, imitates	Home
Breaking a glass of water on the step of the house washes away all the uncleanness and ensures safety of those left	Indu Joni and Indu Helen's parents and past generations	Indu Joni Indu Helen	Instructions of older generation orally transmitted and modelled	Observes, listens, remembers, imitates	Home
Chicken's blood is mixed with rice and placed on top of a grinding stone. It's then taken to all in the village so all who stand on the rice on the stone will have good fortune	Indu Joni's parents and past generations	Indu Joni	Instructions of older generation orally transmitted and modelled	Observes, listens, remembers, imitates	Home
Umbrellas placed over grave and candles lit beside it	Tradition	Indu Joni	Instructions of older generation orally transmitted and modelled	Observes, listens, remembers, imitates	Home/ cemetery
Death is regarded as a very natural occurrence (Told by all 3 informants)	Experience	Each generation	Naturally occurs	Observes, participates in rituals	Every/ where
Our old worn out clothes are waiting for us in heaven	Other people	Indu Helen	Stories of older generation orally transmitted	Listens, remembers	Village
The dead need nice houses in the place of dead spirits	Older Christians	Indu Helen	Stories of older generation orally transmitted	Listens, remembers, acts.	Home/ village

As Indu Joni told me:

We learnt this from our parents. It is passed down from generation to generation. Our parents said we must do it.

Spirits, Omen and Other Supernatural Phenomena

Observation of these phenomena was not possible but people were very willing to talk about their beliefs. Seven women from the three villages, Mama Wona, Mama Lena from One Ox, Ibu Dani and Ibu Wilson from Hilltop and Indu Joni and Indu Ana from Rainbow, were asked specifically about their beliefs in the supernatural and the spirit world.

As the women interviewed were all members of the Christian religion they believed in the supernatural although many of their beliefs appeared to be heavily influenced by their former traditional religion and world view. Often there is confusion over the terminology, which does not always agree with the terms used by anthropologists who have studied the beliefs of the Ngaju Dayak people (e.g. Scharer 1963, Schiller 1997). I have used the terms given to me by the people I spoke with. There was a certain amount of overlap with the previous two topics where supernatural phenomena had featured frequently in the conversations. Aspects of the supernatural not covered by the previous two topics are concentrated on in the tables below. Analysis of the data on beliefs about spirits, omen and other supernatural phenomena was divided into three sections:

- Examples of different spirits and supernatural phenomena
- Malevolent activities of spirits
- Benevolent activities of spirits

How Beliefs About Spirits, Omen and Other Supernatural Phenomena Are Being Passed On

To discover the ways in which these beliefs were being passed on to the next generation the complete set of tables were re-examined and, as for the death, burial and the after-life above, one indicative table from each of the sections of beliefs about spirits, omen and other supernatural phenomena, from each of the villages in turn, was selected as an example to illustrate the way in which that particular belief was being passed on. Comments, where relevant, by people from other villages are also included. The villages were selected in rotation, beginning with Hilltop village. The columns are the same as those used previously. The results can be seen overleaf:

Examples of different spirits and supernatural phenomena

Table 55 Examples of different spirits and supernatural phenomena – Hilltop Village

Belief	Teacher	Learner	Method of teacher	Method of learner	Teaching/ learning location
Eagles believed to be omens and can be 'called up' to give signs	Elders in village. Related to me by older lady, Ibu Gad	Younger generation	Orally instructs, demonstrates	Listens, observes, participates, remembers	Village
There are (<i>nabi</i>) [lit. prophets] (spirits) in the trees.	Older generation, Ibu Wilson	Younger generation	Orally transmitted	Listens, remembers	Home, forest
Dreams have meanings and can guide the dreamer	Older generation, Ibu, Bpk Wilson	Younger generation	Orally transmitted	Listens, observes remembers	Home
Belief in 'ghosts' (<i>hantu</i>)	Older generation, experience	Ibu Wilson	Orally transmitted	Observes, experiences, remembers	A Dayak home
Spirits (understood as the same as <i>hantu</i> above) can inhabit homes, living in traditional water jars (<i>guci</i>)	Past generations that had owned water jars (<i>guci</i>) and family now owning the jars and the 'spirit'	Ibu Wilson	Stories from older generation orally transmitted	Listens, believes, observes experiences	A Dayak home
Spirits can sing traditional songs (<i>kerumut</i>)	Experiences phenomena, interpreted by older generation – Ibu Wilson	Ibu Wilson's daughter	Experience of daughter interpreted by traditional stories orally transmitted	Observes, experiences, listens remembers	A Dayak home
Spirits are affected by the moon	Older generation	Ibu Wilson's daughter	Experience of daughter interpreted by traditional stories orally transmitted	Listen remembers	A Dayak home
Spirits can be benign, just part of tradition	Older generation	Family owning water jars (<i>guci</i>)	Stories orally transmitted	Observes, experiences, remembers	A Dayak home

Many people would tell me about the different spirits known to be in or around their village although they did not necessarily claim to believe in the power of all of these, but they accepted their existence. To what extent any of these 'stories' are believed is debatable

but the stories continue to be passed down through the generations as for example in the story below. Marty, now in his early thirties, remembered the incident from his childhood and firmly believed it. He told me:

When I was small I was sleeping with my parents behind my mother under a mosquito net. My grandfather was very old and he just lay all the while on the floor in the room outside of the bedroom. He lay there all the time, he couldn't move. But on this particular night I was awakened in the middle of the night. I heard footsteps walking softly on the bedroom floor. I could see through the mosquito net, it wasn't the kind you can't see through, and I saw my grandfather walking around the bedroom. He walked around the bedroom, banged a gong that was in the room and then went out again. Outside there was a dog which he hit. The following night he died. He normally wore black short trousers but when I saw him he was wearing white trousers – everything was white. No-one else heard or saw anything but I know I wasn't dreaming. I really saw it and have remembered it up until now. (Informal discussion with Marty in One Ox village)

Thus stories, that are so firmly believed as fact, will be passed on from generation to generation. Similar examples were seen and heard in the other villages.

Malevolent activities of spirits

Many of the activities of the spirit beings were deemed to be harmful and the people were afraid of them or at least aware of the need to placate them in some way so as not to be harmed by them as the table overleaf shows.

Table 56 Malevolent activities of spirits – One Ox Village

Belief	Teacher	Learner	Method of teacher	Method of learner	Teaching/ learning location
'Vampire's' can suck out your heart	Parents – Nore's and Mama Wona's	Nore and younger generation	Tells stories orally	Listens and passes it on orally	Home, anywhere in vicinity of village
'Bad spirits' visit graves	Experience interpreted in the light of popular belief	Mama Wona & her children	Tells stories orally	Listens	Home, fields, anywhere in vicinity of village
Children can be abducted by spirits – good or bad	Popular belief	Family who lost child in the forest	Tells stories orally	Listens and passes it on orally	Home, fields, anywhere in vicinity of village
A curse can be put on people to cause harm, e.g. a decrease in trade at your shop	Experience Interpreted in the light of popular belief	Person cursed – a local trader, (identity not revealed).	Tells stories orally	Listens and passes it on orally	Home, anywhere in vicinity of village

During the course of my interview with Mama Wona, Nore, my Ngaju Dayak assistant remembered a story she had been told by her parents, which Mama Wona confirmed as correct. They had been told that if you sleep with someone new, someone you don't know (that is lie down on an adjacent mat/mattress), don't sleep with your back to them as they may be a *hantuen* (vampire whose head can become detached from its body) and they will suck out your heart. Interestingly at this point Mama Wona's husband, who still belonged to the ethnic Hindu Kaharingan religion and who was also sitting listening said, 'It's just a story'.

I asked Mama Wona if she had passed these stories on to her 10 year daughter, to which she replied, 'Not specifically but she has no doubt heard various ones, like now.' The daughter was sitting on the floor with us throughout the interview. But when I asked if the older 18 year old married daughter who also lives with them, knew the stories, she replied, 'Probably not. If she wasn't interested in hearing them she wouldn't know them'.

The story behind 'Bad spirits visiting graves' in the Table above illustrates also something of the reasons why these stories are passed on. The story was told by Mama Wona to Nore in my absence and later related to me by Nore. The story was also firmly believed by Mama Wona and concerned the presence of a ghost in the form of a malevolent spirit at the grave of a newly buried person. Mama Wona and her small daughter were in her parents village and were walking to their fields. They had to pass the place where someone had been buried earlier in the day. As they drew near they heard the sound of the people having a party and really enjoying themselves. It was the *kambe* (ghost who is a bad spirit) who had come to eat the newly buried person and was having a party over the grave. As it was normally a very quiet place this, for Mama Wona was the only explanation. As a result of this experience she admits that she is still afraid to go near a cemetery because she is afraid of the *kambe*, 'which look like a person but the face is different'.

This raises a number of points. Firstly it was not told to me, the 'sceptical outsider' but was related to the 'local insider' in my absence, probably because Mama Wona thought I may not believe her or at the very least, according to Nore, was probably embarrassed to relate the story to me. This complements Mama Wona's earlier comment about people who want to know are told the stories about the traditional beliefs. Here it would seem that it is also only those who are prepared to take them seriously that are deemed worthy of hearing them.

Secondly the child was with the Mother at the time and the mother's fears were undoubtedly transferred to the child although how much of the explanation was given at this point is difficult to know. In the initial telling of the story the child was almost certainly present. And so the beliefs are passed on and perpetuated.

Thirdly the story was passed on as a warning, in this case a warning not to go near to cemeteries alone, in order to save the listener from harm. It had arisen because late in the afternoon I had visited the local cemetery alone to photograph the grave of a village member who had been buried earlier in the day. No one would come with me, they were all afraid of the 'ghosts'. This story was told by way explanation and justification for their fears.

It is also believed that bad spirits can harm business ventures and when a local small shop started to lose business, almost certainly because of competition due to a number of other people opening similar shops in the village, the demise was attributed to a curse having being put on the family business by someone wishing them ill.

These examples demonstrate how often these beliefs are perpetuated in order to justify an event that is either inexplicable or unacceptable. In the absence of other explanations the traditional ones are held on to. In other cases the traditional belief can again provide the 'scapegoat'.

Benevolent activities of spirits

Not all activities of the spirits are malevolent, some can be positively helpful as in the example below

Table 57 Benevolent activities of Spirits – Rainbow Village

Belief	Teacher	Learner	Method of teacher	Method of learner	Teaching/ learning location
A village spirit protects the village	'Tradition of the ancestors' learnt from parents	Indu Helen	Stories from older generation orally transmitted	Listens, observes, experiences interprets by tradition	Home/village
A village spirit protects the village	'Tradition of the ancestors' learnt from parents	Indu Joni	Stories from older generation orally transmitted	Listens, observes, experiences interprets by tradition	Home/village
A village spirit protects the village	'Tradition of the ancestors' learnt from parents	Indu Ana	Stories from older generation orally transmitted	Listens, observes, experiences interprets by tradition	Home/village
Guardian spirit can be communicated with	Parents and grandparents Bpk Joni	Bpk Joni Bpk Joni's children	Stories from older generation orally transmitted	Listens, observes, experiences interprets by tradition	Home/village
Guardian spirit likes to be given pork	Parents and grandparents Bpk Joni	Bpk Joni Bpk Joni's children	Stories from older generation orally transmitted	Listens, observes, experiences interprets by tradition	Home/village
Bullets can't harm the guardian spirit	Parents and grandparents Bpk Joni	Bpk Joni Bpk Joni's children	Stories from older generation orally transmitted	Listens, observes, experiences interprets by tradition	Home/village
Guardian spirit can only be seen by the shaman	Parents and grandparents Bpk Joni	Bpk Joni Bpk Joni's children	Stories from older generation orally transmitted	Listens, observes, experiences interprets by tradition	Home/village

Whilst interviewing Indu Joni, Bapak Joni, her husband frequently contributed, as seen in the entries in the previous Table.

Mama Lena, in One Ox, related the story of how, just a few days prior to the interview, a boy from the village had been lost in the forest and his parents had contacted the shaman to contact the spirits to help find him. The shaman ascertained from the spirits that the boy

had been taken by a good spirit and would be returned. Eventually the boy found his way back to their hut in the forest. The parents attributed this to the spirit and killed a pig and held a celebration in the spirits honour. This event was known throughout the village and although a number of the Christians did not believe that the spirits were involved the story was heard and passed on to most of the community.

Ensuring Subsistence

Seven women from the three villages were interviewed about their beliefs concerned with ensuring subsistence. They were Mama Yanti, Mama Wona, from One Ox, Ibu Laura, (assisted by her friend Ibu Bambi), Ibu Dani and Ibu Wilson from Hilltop and Indu Helen and Indu Joni from Rainbow. I joined a two day observation of one of the rice-planting ceremonies in One Ox village and was also able to take part in harvesting the rice in Hilltop village. Nevertheless this area yielded less data than earlier sections therefore the findings have not been sub-divided.

How Beliefs About Ensuring Subsistence Are Being Passed On

To discover the ways in which these particular beliefs were being passed on to the next generation the tables were re-examined and all of them have been included, from all three villages, to illustrate the way in which beliefs concerned with ensuring subsistence were being passed on. The same columns were again used. The results can be seen overleaf:

As traditional 'swidden agriculturists' the Ngaju Dayak have been totally dependant on the land, rivers and forest for survival. Whilst that is changing there is still a strong dependence on the land and thus still a desire to control it to ensure good harvests and good crops.

Ensuring a good rice harvest

As the staple food of the Ngaju Dayak is rice then unsurprisingly most of the traditional beliefs are connected with this crop from the initial cutting down of the forest to the harvesting of the crop.

Table 58 Ensuring a good rice harvest – One Ox Village

Belief	Teacher	Learner	Method of teacher	Method of learner	Teaching/ learning location
<i>Tampung Tawar</i> when initially cutting down forest	Mama Yanti's parents Mama Yanti	Mama Yanti, Mama Yanti's children	Models	Observes, participates, remembers, imitates	Rice-fields
<i>Upon Benyi</i> – rice planting ceremony – belief that rice has a 'soul'	Mama Wona	Her children	Models	Attends, listens, observes, remembers, imitates	Rice-fields
' <i>Upon Benyi</i> ' rice planting ceremony	Parents/Older generation	Children	Models	Attends, listens, observes, remembers	Rice-fields
"Names" of seeds can only be handed down to certain people under strict conditions	Older generation	Younger generation	Stories from older generation orally transmitted	Listens, observes, remembers	Home, rice-fields
Burnt snakes in rice-fields mean a good yield. Connected with mythical/ supernatural figure of Indu Sangoman, who brings good fortune.	Older generation Mama Wona	Younger generation	Stories from older generation orally transmitted	Listens, observes, remembers	Rice-fields
Harvesting – first 7 ears of rice are special	Older generation Mama Wona	Younger generation	Stories from older generation orally transmitted	Listens, observes, remembers, imitates	Rice-fields

The first ceremony is concerned with offering a sacrifice or thanksgiving when a part of virgin forest is initially cut down for planting. The *tumpang tawah* ceremony was often carried out and one woman told me she still performed it and intends to pass it on to her children when they are old enough. She explained that they killed a chicken and ate it as a family but was not forthcoming on other details.

Another of the key traditional ceremonies is connected with the planting of the rice seed. The *Upon Benyi* ceremony, which although not carried out by many of the Christians, is still adhered to by others. The ceremony is part of the ritual of providing food for all those

who help with the planting of the rice and takes place in the rice-field to ensure that the spirit of the rice is satisfied and will therefore produce good crops.

Whilst talking about the ceremony I had observed as I sat on the veranda of the house back in the village, I was joined by a neighbour's boy of around 12 yrs of age in year 6 of Primary School. He had not been present at the ceremony I attended but to our astonishment was able to explain all the points of the ceremony in great detail. When asked how he knew so much and had his parents told him, he replied that he just watched the ceremony each year and remembered all the details. When asked if he will perform the ceremony when he has fields of his own, he said yes he certainly would. His parents are members of the traditional ethnic Kaharingan religion but Ali has chosen to be Christian and attends the Sunday School. The eighty year old mother-in-law of Mama Wona where we were staying told me she didn't know what it all meant but you had to follow the tradition of the ancestors.

Snakes are ubiquitous in rice-fields and so often get burned when the field is cleared with the traditional burning method. This has given rise to many beliefs associated with the snake and the belief that the presence of a burnt snake in the field will ensure a good harvest.

Table 59 Ensuring subsistence – Hilltop Village

Belief	Teacher	Learner	Method of teacher	Method of learner	Teaching/ learning location
Land/fields are essential to survival	Traditional inheritance laws passed on by older generation, related to me by Ibu Laura & friend Ibu Bambi	Younger generation	Traditional law passed down in written form and orally transmitted to the younger generation	Observes oral & written tradition enshrined in traditional <i>adat</i> engagement and wedding ceremonies, remembers	Home
In newly cleared forest the earth can be and needs to be 'cooled' down	Parents, older generation – Ibu Dani & Ibu Wilson	Younger generation	Enacted visual aid - earth is 'cooled' by burying an egg & planting certain plants	Observes, imitates, remembers	The forest
Produce in fields can be protected by magic	Older generation – Ibu Dani & Ibu Wilson	Younger generation	Models, oral instruction	Observes, participates, remembers	Fields

Although the people of Rainbow village are also traditionally 'swidden agriculturists' as previously defined in Chapter 2, and dependant on the land, rivers and forest for survival, the location of the village, which floods annually, mitigates against many of the traditional farming methods and associated customs. However, Indu Helen and Indu Joni, two of the three women that I interviewed in Rainbow, were very familiar with a number of traditional beliefs and customs associated with farming and agriculture, having had them passed down to them by their parents, and they in turn had passed on these beliefs to their children even though they were no longer being practised. The third informant, Indu Ana, had seen her parents planting rice, and vegetables but had not continued the practice, again largely due to the location.

Table 60 Ensuring a good rice harvest – Rainbow Village

Belief	Teacher	Learner	Method of teacher	Method of learner	Teaching/ learning location
Spirits live in the forest and have to be asked permission to cut it down, prior to planting rice	Former generations	Indu Helen	Models, orally transmits	Listens, observes, imitates, remembers	Home/forest
All tools for cutting down forest have to be smeared with a chicken's egg to ensure Satan won't trouble the farmers	Former generations	Indu Helen	Models, orally transmits	Listens, observes, imitates, remembers	Home/forest
Ground has to be 'cooled' before cutting down the trees & the implements	Indu Joni's parents	Indu Joni	Models, orally transmits	Listens, observes, imitates, remembers	Home/forest
Need to 'bless' the rice seed before planting (<i>upon benyi</i>)	Former generations	Indu Helen Indu Joni	Models, orally transmits	Listens, observes, imitates, remembers	Home/forest
The 'blessed' seed is saved to be planted the following year	Former generations	Indu Helen	Models, orally transmits	Listens, observes, imitates, remembers	Home/forest
'Food' given to the stones and the tools when harvesting – egg smeared on them	Former generations	Bpk & Indu Joni	Models, orally transmits	Listens, observes, imitates, remembers	Home/forest

Table 61 Ensuring the rubber trees are productive – Rainbow Village

Belief	Teacher	Learner	Method of teacher	Method of learner	Teaching/ learning location
Sprinkling rice-porridge around the rubber trees to ensure a good yield	Former generations	Bpk & Indu Joni	Models, orally transmits	Listens, observes, imitates, remembers	Home/forest

The only example I heard about ceremonies concerned with yields other than rice was Indu Joni in Rainbow Village who told me about the ceremony in Table 61 above, to ensure a good yield from the rubber trees.

This concludes the tables setting out how the beliefs were being passed on. Before proceeding to a discussion of these and the skills tables in the previous chapter I shall present in the following chapter tables showing how values are being passed on.

Chapter 7

VALUES RESULTS: HOW VALUES ARE BEING PASSED ON

Informal Structured Interviews

Both observations and interviews were carried out in all three villages in connection with the values domain. However, in this domain an additional data collecting instrument, informal structured interviews, were also used to try to establish how far the values of Ngaju Dayak people which had been identified in an Indonesian government report of 1996 (Rampai 1996) still pertained. The report had established that the values of discipline, honesty, politeness, obedience, responsibility, independence and harmony with their negative corollaries of disobedience to parents, laziness, lying, stealing and fighting were the key values of the Ngaju Dayak people at that time. Hence to try to discover how far these values were still held in the twenty first century, informal structured interviews took place (see Appendix 1) and questions were asked in order to rank the importance of the various values. In addition open ended questions were asked to discover whether these values, and/or any others were still held.

Analysis of Informal Structured Interviews

A total of eleven women out of the total of seventeen participants were available to be interviewed about values, five from One Ox village, Mama Ray, Mama Sony, Mama Edwin, Mama Yanti and Mama Merry, three from Hilltop village, Ibu Wilson, Ibu Dani and Ibu Laura and three from Rainbow village, Indu Ana, Indu Helen and Indu Joni. All of the results tables from all three villages have been included below. The responses to the first two open-ended questions were not necessarily given in order of importance but as the informants thought of them.

What is your definition of a 'good' child?

Table 62 Definition of a 'good' child – One Ox Village

Mama Roy	Mama Sony	Mama Edwin	Mama Yuli	Mama Merry
Obedient	Helps with the cooking	Doesn't mix with wrong people	Obedient to parents	Obeys their parents
Likes work	Helps wash the dishes	Works hard	Fears the Lord and goes often to Church to worship	Helps parents with their work
Successful (in work & education)	Learns	Stays at home	Obedient	
			Often work on their own	

Table 63 Definition of a 'good' child – Hilltop Village

Ibu Wilson	Ibu Dani	Ibu Laura
Well behaved	Obedient	Wants what the parents want
Good character	Diligent in learning	Obedient
Obedient	Diligent in worshipping God	Isn't naughty
Diligent in worshipping God	Diligent in his/her work	Clever
Works well at what his/her parents approve of		Supports his/her parents in their work
		Continues his/her education and helps the parents

Table 64 Definition of a 'good' child – Rainbow Village

Indu Ana	Indu Joni	Indu Helen
Obeys parents	Obeys parents	Polite to parents
Helps parents	Doesn't truant from school	Doesn't hurt parents feelings
Worships/attends church	Works hard at school	Doesn't interrupt parents conversations
	Uses money sensibly – Doesn't waste it	Obeys parents when told to do something
	Doesn't fight	Learns well at school
	Doesn't deceive his/her parents	
	Doesn't lie	

What is your definition of a 'bad' or naughty child?

Table 65 Definition of a 'bad' or naughty Child – One Ox Village

Mama Roy	Mama Sony	Mama Edwin	Mama Yuli	Mama Merry
One who contradicts you/doesn't obey	Hits his/her friends	Goes off with wrong people	Disobeys their parents	Disobeys parents
Doesn't work hard at school	Doesn't help (parents)	Doesn't stay at home		Doesn't want to obey
Doesn't want to get on with their own work	Goes against his/her parents	Doesn't clean the house		
Gets up late				
Is lazy about bathing				

Table 66 Definition of a 'bad' or naughty child – Hilltop Village

Ibu Wilson	Ibu Dani	Ibu Laura
Doesn't do what his/her parents approve of	Disobeys parents	Disobeys parents
Does what his/her parents forbid e.g. stealing, making parents annoyed	Gets drunk	Doesn't Listens to parents advice
Bothers other people	Gambles	
Does things that cause his/her parents to feel uncomfortable	Steals	

Table 67 Definition of a 'bad' or naughty child – Rainbow Village

Indu Ana	Indu Joni	Indu Helen
Doesn't Listens to parents	Doesn't use money as instructed	Doesn't obey parents
Gets drunk	Doesn't obey parents	Makes no response to advice given
Gambles	Takes other peoples things	
Takes drugs	Takes drugs	
Too familiar with opposite sex	Gets drunk	
	Gambles	

Of the seven positive characteristics noted in the Indonesian report mentioned above (Rampai 1996) all featured in the responses indicating they were still important.

Obedience: It can be seen from the responses, that obedience is one of the most prominent values. For four of the six respondents in One Ox village it was the first thing mentioned. Ibu Edwin expects the child to help his/her parents and so also implies obedience/respect for parents. She also places 'going against his/her parents' as part of her definition of a naughty child again implying that obedience to parents is important. Five out of the other six respondents in Hilltop and Rainbow villages put some form of obedience/disobedience to parents as the first thing that they mentioned, both positively and negatively.

Discipline: Four of the six women in One Ox mentioned aspects of working hard, i.e. 'Likes work', 'Works hard', 'Learns', 'Often work on their own', all of which would suggest that a degree of self discipline is valued. Likewise in the negative characteristics of 'not working hard' and 'not wanting to get on with their own work' this was further suggested. In the other villages the same idea of diligence, particularly over school work according to one mother, also featured. Other aspects of discipline may also be included in the ideas of obedience.

Responsibility: References to helping parents with their work, one to being good to other people and another to being careful in the use of money, would all suggest responsibility being valued. Also discipline in learning and working mentioned above can also be seen

as implying responsibility. Conversely laziness, getting up late and not helping with the daily work are also seen as reprehensible, thus further endorsing the value of responsibility.

Independence: One of the respondents specifically referred to 'often working on their own' which would be a sign of independence.

Honesty: Stealing is specifically mentioned as being wrong as well as 'taking other peoples things.'

Politeness: Reference is made to the importance of politeness and references to the dislike of someone who contradicts could be interpreted as a dislike of impoliteness. and also of disturbing the harmony of the family.

Harmony: 'Hits his/her friends' could be interpreted as disturbing the harmony of relationships and specific mention is made to fighting and to 'bothering other people' both of which disturb harmonious relationships.

Seven positive characteristics (In rank order of importance)

Question three asked the respondents to arrange seven cards in order of importance, according to their own opinions. The cards were labelled with the same seven values, based on the information given in the report mentioned above. They were: discipline, honesty, politeness, obedience, responsibility, independence, harmony.

The responses are recorded below.

Table 68 Seven positive characteristics in order of importance – One Ox Village

Mama Roy	Mama Sony	Mama Edwin	Mama Yuli	Mama Merry
Obedience	Obedience	Honesty	Obedience	Obedience
Discipline	Honesty	Harmony	Politeness	Discipline
Honesty	Politeness	Obedience	Discipline	Politeness
Responsibility	Independence	Independence	Independence	Honesty
Independence	Harmony	Politeness	Honesty	Harmony
Politeness	Responsibility	Responsibility	Harmony	Independence
Harmony	No response	Discipline	Responsibility	Responsibility

Each was assigned a numerical value according to its position in Table, i.e. first – 1 second –2 and so on. This was repeated for all three villages. The lowest scores indicate the highest positions in the table.

Table 69 Seven positive characteristics ranked - One Ox Village

Value						Total
Obedience	1	1	3	1	1	7
Honesty	3	2	1	5	4	15
Discipline	2	2.7*	8	3	2	17.7
Politeness	6	3	6	2	3	20
Independence	5	5	4	4	6	24
Harmony	7	6	2	7	4	26
Responsibility	4	7	7	8	7	33

*(Missing from correspondent 3. Given average of other correspondents responses)

Obedience (7) was the most valued of the seven characteristics, with honesty (15) the second. Discipline is the third most important.

Table 70 Seven positive characteristics in order of importance – Hilltop Village

Ibu Wilson	Ibu Dani	Ibu Laura
Politeness	Harmony	Politeness
Obedience	Honesty	Obedience
Honesty	Obedience	Discipline
Responsibility	Politeness	Responsibility
Discipline	Responsibility	Honesty
Harmony	Independence	Independence
Independence	Discipline	Harmony

Table 71 Seven positive characteristics ranked – Hilltop Village

Value				Total
Politeness	1	4	1	6
Obedience	2	3	2	7
Honesty	3	2	5	10
Responsibility	4	5	4	13
Harmony	6	1	7	14
Discipline	5	7	3	15

Independence	7	6	7	20
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Once again obedience features strongly in the replies together with politeness, re-enforcing the definitions given in reply to the first two questions

Table 72 Seven positive characteristics in order of importance –Rainbow Village

Indu Ana	Indu Joni	Indu Helen
Obedience	Harmony	Discipline
Honesty	Honesty	Politeness
Politeness	Obedience	Obedience
Harmony	Politeness	Honesty
Discipline	Responsibility	Harmony
Independence	Independence	Independence
Responsibility	Discipline	Responsibility

Table 73 Seven positive characteristics ranked – Rainbow Village

Value				Total
Obedience	1	3	3	7
Honesty	2	2	4	8
Politeness	3	4	2	9
Harmony	4	1	5	10
Discipline	5	7	1	13
Independence	6	6	7	19
Responsibility	7	5	8	20

Of the seven given values, obedience once again ranked as the most desirable quality.

Five negative characteristics - ranked

Question four asked the respondents to put 5 cards in order of importance according to their opinions, i.e. to place the worst characteristic first in the list. The five characteristics, again taken from the report quoted previously were:

Disobedience to parents, laziness, lying, stealing, fighting. Only four of the five respondents in One Ox village were available to complete this question. The responses are given in Tables 74 – 79 overleaf.

Table 74 Five negative characteristics in order of importance - One Ox Village

Mama Roy	Mama Sony	Mama Edwin	Mama Yuli	Mama Merry
Disobeying parents	Stealing	Lazy	Disobeying parents	Didn't participate
Lazy	Fighting	Stealing	Lazy	
Lying	Lying	Lying	Lying	
Fighting	Disobeying parents	Disobeying parents	Fighting	
Stealing	Lazy	Fighting	Stealing	

Each attribute was again assigned a numerical value according to its position in table, i.e. first – 1, second –2 and so on. This was repeated for all three villages. The lowest scores indicate the highest positions in the table.

Table 75 Negative characteristics ranked - One Ox Village

Value					Total
Disobeys parents	1	4	4	1	10
Laziness	2	5	1	3	11
Lying	3	3	3	3	12
Stealing	5	1	2	5	13
Fighting	4	2	5	4	15

According to Mama Roy, Mama Sony, Mama Edwin, and Mama Yuli, disobedience to parents was seen as marginally the overall worst offence. It does however, agree with the findings of the positive question above which showed obedience as the most important characteristic. All the behaviours were fairly equally disapproved of with there being only one place between disobedience to parents, laziness, lying and stealing, with fighting only two behind that, suggesting that all are still considered equally reprehensible.

Table 76 Five negative characteristics in order of importance – Hilltop Village

Ibu Wilson	Ibu Dani	Ibu Laura
Stealing	Disobeying parents	Disobeying parents
Lying	Lying	Lazy
Disobeying parents	Stealing	Lying
Fighting	Fighting	Stealing
Lazy	Lazy	Fighting

Table 77 Negative characteristics ranked – Hilltop Village

Value				Total
Disobeys parents	3	1	1	5
Lying	2	2	3	7
Stealing	1	3	4	8
Laziness	5	5	2	12
Fighting	4	4	5	13

According to Ibu Wilson, Ibu Dani and Ibu Laura, disobedience to parents is seen as the overall worst offence with lying and stealing close behind, which again reinforces the responses made to the previous question, ordering the positive behaviours, and the definitions given earlier. According to Ibu Wilson stealing would result in the child being hit because, 'It makes parents ashamed – it's a sin' and lying also because, 'It makes the parents ashamed'

Table 78 Five negative characteristics in order of importance – Rainbow Village

Indu Ana	Indu Joni	Indu Helen
Stealing	Stealing	Stealing
Fighting	Fighting	Lying
Lying	Lying	Fighting
Disobeying parents	Lazy	Disobeying parents
Lazy	Disobeying parents	Lazy

Table 79 Negative characteristics ranked - Rainbow Village

Value				Total
Stealing	1	1	1	3
Fighting	2	2	3	7
Lying	3	3	2	10
Disobedience	4	5	4	13
Lazy	5	4	5	14

In Rainbow village, stealing was clearly the worst behaviour according to all three of the women. They saw it as bringing shame on the whole family as Indu Ana and Indu Joni explained:

Stealing is worst because it is taking what is other people's by right. It shames the family (Indu Ana).

If they steal from their parents there is no money for rice. If they steal from other people it shames the parents especially if they are caught by the police and/or it gets into the papers (Indu Joni).

Although in Rainbow village obedience was rated as the most desirable value, when asked to rank the least desirable the opposite, disobedience, was ranked behind fighting, lying and getting drunk. However, as the sample was so small and the values were given, it is important to bear in mind Indu Joni's comment that all six behaviours mentioned were ones which she as a parent abhorred.

The values identified by the report in 1996 were still held by the Ngaju Dayak people in 2007/8 with obedience to, and respect for, parents being considered the most important. However, while all the values seemed to still be held it was recognised that the lists given in questions three and four were closed lists not giving any room for a broader definition of values or being able to accommodate more diverse answers.

The most important thing to pass on to your children

A further open-ended question was therefore introduced which asked the informants what was the most important thing they would like to pass on to their children and how they proposed to pass it on. The replies were as follows:

To learn to help with the work (Mama Susan).

The most important thing is for them to marry, but if they have money to finish school or university it is better to finish their education and then marry. But if they haven't the money to finish school then get married (Mama Edwin).

Two younger married women, one with a toddler and one without children yet, were asked the same question and they replied:

Submit to their parents (Mama Mary – mother of toddler).

Right behaviour towards their parents (Mandy, 18 year old married girl in the village, with no children yet).

These responses again underline the importance of obeying, helping and submitting to parents and the importance of marrying.

Other responses were:

To have plenty of skills so that making a living is not too difficult. The skills have to be in accordance with their gifts. Three of my girls can sew, though only one is really gifted. The others can help other people, they are good with money and can mend things. (Ibu Wilson)

To be able to keep house, clean and cook when they are still small, both the boys and the girls. When they are older to be able to work and make money if they haven't continued their schooling. If they can continue their education I want them to complete it. (Ibu Deni)

They should be useful to their parents, obey their parents and do what their parents want even after they have their own families. To work hard. To be children who are responsible towards their family, both their own and their parents families. (Ibu Laura)

'That they become good people, obey their parents and live peaceably. That their families will be good families, so that they don't cause problems with other people but are a good example to others. So they don't fight or argue and so that they can be better (more prosperous/advanced) than their parents – having a car, house, modern appliances.' (Indu Ana)

Schooling (formal education).

Everyday skills to manage the house and look after themselves.

Teaching them to mix with the right people. (Indu Joni)

To obey their parents. To learn what their parents advise.

To learn that the taboos from the ancestors must be kept. (Indu Helen)

(The background to this is that in their family there is a taboo that says that after they are married they mustn't eat *lawang* - a particular fish. If they do their children will die. Indu Helen's older brother who was a Christian, said it didn't matter and ate it. Two of his children died suddenly. Now he's gone back to his former religion of Kaharingan. Two of his grandchildren have also died).

Passing on the values

They were then asked, 'How are you trying/how did you try to pass on these values?'

The replies were as follows:

Talked to them and instructed them verbally. Advised and reminded them. (Indu Joni)

I sent them to school in the city so they could follow the example of the people in the city who are good [more advanced/prosperous]. Teach them and advise them. By the parents being a good example in their work and the home, the wife not fighting with her husband, going to church and reading the Bible. (Indu Ana)

Just tell them! (Indu Helen)

Data from Observations and Informal Semi-Structured Interviews

The observation and informal semi-structured interview data was then analysed, again using content analysis. A number of values were identified. The values themselves, being by their nature abstract, could not be observed but actions or attitudes which demonstrated the value were. The values which emerged were mainly what I have termed 'traditional relational values' largely based on the values of the aforementioned report. However, it was also noted that formal education was to some extent valued. The relational values were divided into 'family values' and 'community values' although there was quite a degree of overlap between these two. The 'family values' included marriage and the importance of children, obedience to and respect for parents. Independence was mainly observed within the context of the family, though not exclusively. Harmony and patience were seen to be desirable in the family and the community thus also spanning both categories. For convenience patience and harmony have been placed in the family category. Values noted in the 'community values' category were: community spirit demonstrated in community gatherings, hospitality, generosity, and mutual co-operation.

While it is acknowledged that even the complete set of tables is only a sample of the values that the women held, they were the ones most clearly observed during the periods of observation. Not all the tables have been included below as the emphasis of the research is on the ways in which these values are transferred and the method of transfer of values can be well demonstrated in the examples given. There are a selection of entries for each sub-category, e.g. the values connected with 'marriage, family life and children' are subdivided into the sub-categories of marriage, extended families, the importance of children. The examples are taken from all three villages whenever data was available. The final column regarding the location of the teaching and learning in the tables relating to skills and beliefs has been replaced in the values tables by one referring to the situation where the value was demonstrated, which seemed to be a more relevant category for this domain, the location being less important than the situation. The order below does not reflect the relative importance of each value, merely the order in which they appeared in the analysis of the observations.

Relational Values

Family values

1. Marriage

The family is the key unit of social structure among these Ngaju Dayak people. From living among them and from formal observations it would appear that most informal learning takes place within the context of the family and most of the Ngaju Dayak women's life experiences occur within the orbit of the extended family.

Table 80 Marriage – One Ox Village

Value	Situations where demonstrated	Teacher	Learner	Method of teacher	Method of learner
Marriage	Pressure put on children by parents to marry. Parents still active in 'finding' partners	Parents	Children	Repeats, advises orally a	Listens, concurs
	Many girls still married as teenagers (16,17yrs)	Parents/older generation	Younger generation	Models, (older cousins/ sisters etc)	Observes imitates

Table 81 Marriage –Hilltop Village

Value	Situations where demonstrated	Teacher	Learner	Method of teacher	Method of learner
Marriage	Girls married at 15 yrs	Parents/older generation	Bride & groom. Younger generation	Models (social group), peer group pressure	Observes, Listens, concurs
Marriage	<i>Ibu Nelly married at 16 so didn't complete education</i> Ibu Rensi's sisters had all married at 14/15yrs & had children soon after	Parents/older generation	Younger generation	Models (social group), peer group pressure	Observes, Listens, concurs

Table 82 Marriage – Rainbow Village

Value	Situations where demonstrated	Teacher	Learner	Method of teacher	Method of learner
Marriage	Neighbour's daughter just beginning yr.10 of school, arranging to get married	Parents, older generation	Young people	Advises, persuades, encourages	Listens, concurs

The value placed on marriage remains very high and the pressure from the older generation on the younger to marry young is still evident. Whilst more and more younger people are not returning to the villages after completing further or higher education, girls, particularly those who do not continue their education beyond school year 9, often marry soon after leaving school, as evidenced above.

In Rainbow village, even though further education was available in the nearby city, many of the young people were still getting married rather than continuing their education. Fifteen of the young people (under 30), ten girls and five boys, out of approximately forty four families currently living in the village had dropped out of school in favour of getting married and having children. The majority of these had not completed twelve years of schooling.

2. Extended families

Table 83 Extended families – One Ox Village

Value	Situations where demonstrated	Teacher	Learner	Method of teacher	Method of learner
Extended families	Modelled in extended, multi-generational families. Grandchildren living with grandparents	Extended family/grand parents	Grand children	Models	Experiences

Table 84 Extended families – Hilltop Village

Value	Situations where demonstrated	Teacher	Learner	Method of teacher	Method of learner
Closeness of extended family	Staying in the <i>pondok</i> (hut) in the fields together. Telling stories	Parents/grand parents	Children/grandchildren	Models	Experiences, participates, observes, listens
	Great many members of ext. family gathered for funeral.	Older generation	Younger generation	Models	Observes, listens, participates
Care of elderly	Elderly parents cared for in home by children. Dying grandma given Holy Communion	Parents/grand parents	Younger generation children & grandchildren	Models	Observes, listens, participates

Table 85 Extended families – Rainbow Village

Value	Situations where demonstrated	Teacher	Learner	Method of teacher	Method of learner
Extended family – living together	Bpk Raymond's family, 3 generations living together	Parents, older generation	Young people	Models	Experiences, observes, listens, participates
Extended family working together	All Bpk Raymond's extended family help with the family shop	Parents, older generation	Young people	Models	Observes, imitation, participates

Whilst the traditional Dayak 'longhouse', housing numerous families under one roof, is no longer the practice in these villages in Central Kalimantan, the sense of community generated by multi-generational families living together is still an important aspect of life for these Ngaju Dayak people and so extended families living in one house or with grandparents and brothers and sisters in adjacent houses, was a common feature.

The number of three generational families living in Rainbow village was relatively high given the limited employment opportunities and its proximity to the city, which is often seen by the young as a preferable location to the village. This was probably because of the relatively high number of young people who had married rather than continuing their education.

3. Importance of children

Table 86 Children – One Ox Village

Value	Situations where demonstrated	Teacher	Learner	Method of teacher	Method of learner
Children are your future	Without children 'you have no future.'	Father	Children	Discusses informally	Listens, observes, believes, concurs
	'The future is brighter with a family'	Mother	Children	Discusses informally	Listens, observes, believes, concurs
	Telling stories of misfortune of those who haven't married	Mother	Children	Tells stories of other people's experience	Listens, observes, believes, concurs

As shown above, marriage is still highly valued in One Ox, because of the necessity to produce children. The practice of arranged marriages such as Mama Edwin's, forty three years previously, is still sometimes practised though more usually now the young people choose their own partners but parental involvement is still very much in evidence. Many parents feel it is their duty or responsibility to ensure that their children are married. Bapak Ray in One Ox said when asked about finding his daughter a husband: 'Certainly she needs to be found a partner. It's our responsibility'. Extended families are still common and the belief that children are the key to the future is widespread.

4. Obedience to parents

From observations and informal discussions, obedience to parents is still the most important thing in the eyes of parents. When it comes to major decisions, the will of the parents is considered, at least in theory, to be of paramount importance.

Table 87 Obedience to parents - One Ox Village

Value	Situations where demonstrated	Teacher	Learner	Method of teacher	Method of learner
Obedience to parents/elders	In agreeing to arranged marriages	Parents	Children	Instructs orally	Listens, concurs
	In carrying out instruction to read the entire Bible	Father	Young son	Commands orally	Listens, concurs
	Children carry on pregnancy taboos	Mother	Daughter	Instructs orally	Listens, concurs

Table 88 Obedience to parents – Hilltop Village

Value	Situations where demonstrated	Teacher	Learner	Method of Teacher	Method of learner
Obedience to parents/elders	Ibu Anton's sons shopping, sweeping, cooking	Mother	Sons	Requests, commands	Listens, observes practices
	Mother says Nelly (Yr 6) will only work if hit	Mother	Daughter	Punishes (hits)	Experiences (and respond to punishment)
	Primary School-aged children very well behaved at House Meeting – sat silently throughout	Primary School teachers, Parents	Primary School pupils	Oral instruction by parents that teachers are to be obeyed. Teachers command, reprimand verbally	Listens, obeys, practices
	Pre-schoolers appear to be given complete freedom at House Meetings & Church	Parents/older generation	Pre-schoolers/ younger generation	Implicitly taught through inaction & non-intervention	Imitates, experiments

Table 89 Obedience to parents – Rainbow Village

Value	Situations where demonstrated	Teacher	Learner	Method of teacher	Method of learner
Obedience to parents	Bella expected to obey mother in the home	Mother, older generation	Daughter, Bella	Oral instructions and commands	Listens, concurs practises

Obedience to parents is often seen at the crucial stages of life such as at births and marriages. Talking about marrying young, Mama Edwin said:

What can you do? I didn't feel ready to marry but you can't disobey your parents.

There is great fear that if pregnancy taboos passed down from the grandparents to the parents and on to the children are not adhered to then the children have only themselves to blame if things go wrong, so Mama Lena's comment was:

If we don't follow our parents instructions then we blame ourselves.

In other areas too obedience is evident. Bapak Lena told me,

My father made me read the whole Bible until I finished it. Because I respected my father, I obeyed him. You have to obey your parents.

Obedience to parents was still seen to be valued in daily family life. Closely allied to obedience was the concept of respect for parents. Indeed, great respect for parents is shown, particularly in death, as evidenced in the tables below.

5. *Respect for parents*

Table 90 Respect for parents - One Ox Village

Value	Situations where demonstrated	Teacher	Learner	Method of teacher	Method of learner
Respect for parents	In death and burial rituals in general	Children/ family of deceased	Grand-children	Models	Observes, listens, participates
	Carrying out 40 day ceremony after burial	Family	Children/ grand children	Models	Observes, listens, participates
	Secondary mortuary ceremony – washing bones, restoring grave.	Family	Younger generation	Models	Observes, listens, participates

Table 91 Respect for parents – Hilltop Village

Value	Situations where demonstrated	Teacher	Learner	Method of Teacher	Method of learner
Respect for parents/ elders	Parents still respected after death. Body guarded before burial	Older generation	Children & grand children	Models, Tradition passed down orally	Observes, listens, participates
	Thanks giving service for graves when cleaned, tiled, cemented and given roofs.	Older generation. Church teaches the necessity of this	Younger generation Congregation	Models, tradition passed down orally (Taught & justified from Bible)	Observes, listens, participates
	Large extended family gather to show respect for elders who have died	Older generation	Children & grand children	Models, tradition passed down orally	Observes, listens, participates

Table 92 Respect for parents - Rainbow Village

Value	Situations where demonstrated	Teacher	Learner	Method of teacher	Method of learner
Respect for deceased parents	Providing fine graves and tombs shows respect for the dead	Indu Joni's parents and past generations	Indu Joni & her children	Oral instruction, models	Observes, listens, imitates
Respect for deceased parents	Burying parents together in fine graves shows respect	Indu Ana's parents and grandparents	Indu Ana	Oral instruction, models	Observes, listens, imitates

Respect for parents is clearly demonstrated throughout the funeral ceremonies, e.g. the family bathe the body, the body is never left unattended by some member of the family, day and night until burial. The coffin is usually carried by children of the deceased. An umbrella is placed over the coffin and over the grave to protect the deceased from the sun and rain. (A later informant in another village said it was to protect the name written on the cross at the head of the coffin). It is also seen in the cleaning of the bones and restoration of the graves.

Respect is also shown towards school teachers, particularly in primary schools as shown in the example below from Hilltop, where I observed three complete lessons taking place in the primary schools.

Table 93 Respect for teachers – Hilltop Village

Value	Situations where demonstrated	Teacher	Learner	Method of teacher	Method of learner
Respect for teachers	Primary school teachers obeyed by pupils. Never ask questions Pupils work in silence. Copy from black-board	Teacher	Pupils	Commands, instructs, expects, participates	Listens, rote learns, practices

6. *Patience*

The slow pace of village life and the lack of modern technology, making it necessary to perform most tasks from scratch, may account partly for the patience that the people exhibit in their everyday lives.

Table 94 Patience - One Ox Village

Value	Situations where demonstrated	Teacher	Learner	Method of teacher	Method of learner
Patience	In marriage relationships	Mother	Children	Models	Observes, listens
	In performing routine tasks – grating coconut for an hour	Mother	Children	Models	Observes, imitates

Table 95 Patience – Hilltop Village

Value	Situations where demonstrated	Teacher	Learner	Method of Teacher	Method of learner
Patience	Sealing plastic bags with candles, for number of hours.	Older generation	Younger generation	Models,	Observes, participates experiences
	Just sitting waiting for ½ hr for lights to come on	Older generation	Younger generation	Models	Imitates

Table 96 Patience – Rainbow Village

Value	Situations where demonstrated	Teacher	Learner	Method of teacher	Method of learner
Patience	Indu Raymond making and filling dozens of tiny polythene bags with peanuts	Other women	Indu Raymond	Models	Observes, imitates

Patience in all relationships and aspects of life is very evident. In One Ox village Mama Ray, talking about her marriage said:

The important thing is that we are patient. Certainly that's me, patient, just patient, receive whatever trials and difficulties come in my life. That's all, that's my key to it, so that we can live.

In the everyday routine that is life for the Ngaju Dayak an incredible amount of patience is needed. I watched women grate coconut by hand for over an hour in preparation for a celebration that was going to take place. Even Rainbow village, in spite of its proximity to the city, still lacks many modern technological devices. Time and labour continue to be the most readily available commodities and therefore great patience is often exercised in carrying out the every day tasks such as Indu Raymond filling tiny plastic bags with peanuts she had fried, to sell them in her shop. In a labour intensive, low tech. society, many tasks which would seem very monotonous and boring to those from more

technically advanced societies are undertaken with great patience as witnessed above. Nothing can be taken for granted, the generator may fail, the torrential tropical rain may prevent anyone going into the forest to tap the rubber, transport may fail to materialize. In this setting patience becomes an important value.

7. Harmony

Table 97 Harmony - One Ox Village

Value	Situations where demonstrated	Teacher	Learner	Method of teacher	Method of learner
Harmony within the family	Children coaxed rather than forced so confrontation is avoided	Mother	Children	Persuades	Experiments
	Children given what they demand so confrontation is avoided	Mother	Children	Concedes, Condone	Experiments
	Children present in Church at Women's meeting allowed complete freedom	Parents collectively	Children	<i>Doesn't intervene</i>	Experiments
	'They were a very harmonious family'	Older generation Mama Ray lived with	Mama Ray	Models	Experiments

Table 98 Harmony – Hilltop Village

Value	Situations where demonstrated	Teacher	Learner	Method of Teacher	Method of learner
Religious harmony	Muslims, Christians and Hindu-Kaharingan religions all living side by side in village	Older generation	Younger generation	Models	Observes, listens, participates
Communal agreement (<i>musyawarah</i>)	Collective decision making – all worked together on apportioning Christmas Service tasks	Older generation	Younger generation	Models	Observes, listens, participates
Harmony in family and society	Children pacified with breast milk, sweets etc rather than risk a 'scene'	Older generation	Younger generation	Models	Observes, listens, participates

Table 99 Harmony - Rainbow

Value	Situations where demonstrated	Teacher	Learner	Method of teacher	Method of learner
Harmony Between parents and children	Disobedience in small things ignored to preserve harmony	Mother, Indu Bella	Daughter, Bella	Models	Experiments
Harmony Between parents and children	Small boy given in to by mother to avoid a confrontation	Mother, Indu Anu	Son, Anu	Models	Experiments
Harmony between generations	Bella encouraged and only very gently rebuked	Aunt, Nova, Mother, Indu Bella	Daughter Bella	Demonstrates, encourages	Observes, experiences

Speaking with obvious admiration for a family she had lived with for a time, Mama Ray, in One Ox village said: 'They were indeed a very harmonious family'. Harmony in family life is valued. Against this background children tend to be coaxed rather than forced in order to avoid confrontation. Mama Natan's youngest son in One Ox village was told frequently to have his morning bath but refused and nothing more was said until later, then another request was made by mother. This continued many times before the child eventually submitted and any 'show-down' had been avoided. Likewise children tend to be given whatever they demand when in a shop or demanding to do something. To stop the child crying they are usually given what they are asking for. Children present at a Women's Meeting in Church were allowed complete freedom. They rang the Church bell, yelled, crawled under seats etc. with no restraint whatsoever.

Harmony in Hilltop Village was more clearly expressed in it's community aspect rather than family, although harmony within the family was valued for example by the way small children were quickly put to the breast to be pacified when they began to whine or to cry so as not to disturb people. Religious harmony, also highly prized by the Indonesian constitution, was a reality in Hilltop Village as Muslim, Kaharingan and Christian people all lived side by side. At one of the large Christian pre-funeral services I attended, Muslim and Kaharingan women had joined with their Christian neighbours to help with all the catering.

Another pillar of the *Pancasila*, the five principles underlying the Indonesian constitution, is the idea of having full discussions in order to come to a common agreement or decision.

This is also valued at a local village level and is demonstrated above in the way the women discussed the different roles to be taken at the Women's Christmas Service and eventually made a mutually acceptable decision.

Whilst obedience to parents was given as the overall most important value in answer to the structured and closed questions above, in practice it would appear that often harmony was actually more important. Maintaining harmony within the family, especially in public, often seemed very important and more so than exacting obedience.

Community Values

1. Community spirit

The sense of community extends beyond even the extended family and encompasses the whole village. This was seen most clearly at the major celebrations in the villages, particularly at weddings and funerals.

Table 100 Sense of community - One Ox Village

Value	Situations where demonstrated	Teacher	Learner	Method of teacher	Method of learner
Community Spirit	Showing kindness (taking food) to family of deceased – non relatives	Older generation	Younger generation	Models	Observes, imitates
	Newly weds visit many families in community after wedding	Older generation	Younger generation	Models oral instruction	Observes, listens, imitates
	All the village invited to a wedding	Older generation	Younger generation	Models	Observes, listens, participates

Table 101 Sense of community – Hilltop Village

Value	Situations where demonstrated	Teacher	Learner	Method of Teacher	Method of learner
Community spirit	Friends & neighbours – all religions taking gifts to bereaved and helping with cooking etc.	Older generation	Younger generation	Models	Observes, imitates
	Making of paper flowers and wreaths	Older generation	Younger generation	Demonstrates, models	Observes, participates
	Monetary offerings at services of condolence given to bereaved families	Church	Younger generation/ all church members	Oral instruction, models	Listens, observes
	Large numbers attend services of condolence every night for 4 nights	Older generation	Younger generation	Models	Observes, participates

Table 102 Sense of community – Rainbow Village

Value	Situations where demonstrated	Teacher	Learner	Method of teacher	Method of learner
Community spirit	Refreshments served at Christian House Meeting	Older women	Younger generation	Models	Observes, participates

All the village participated in the major celebrations and so at weddings and funerals everyone went along, including the children and all were fed a rice meal. After a wedding the newly married couple were expected to visit a large number of homes in the village and were given presents by each family visited. When someone dies, the women, from different families and different religions, can be seen making their way to the house of the deceased bearing gifts of rice, sugar etc. for use by the grieving family for all the meals they will have to provide. During my time in Rainbow village there were no weddings or funerals but the Christian community demonstrated the same community spirit at the weekly Christian House Meeting attended by twenty to thirty adults and around fifteen children, when refreshments were always served and everyone participated in helping to serve and clear up.

2. Hospitality and generosity

Closely allied to having a sense of community is the hospitality and generosity for which Indonesian people in general have a reputation. The Ngaju Dayak are no exception.

Table 103 Hospitality and generosity - One Ox Village

Value	Situations where demonstrated	Teacher	Learner	Method of teacher	Method of learner
Hospitality	Welcomed in homes throughout my stay in the villages	Ngaju families – Mothers and fathers	Guests and the younger generation	Models	Accepts, participates
	Whoever is present when food is served is invited repeatedly to eat	Older generation	Children , grandchildren	Models	Listens, participates, absorbs
Generosity	Paid me for rubber tapping, although they had taught me	Parents (middle aged) generation	Younger generation	Models	Observes, listens, absorbs

Table 104 Hospitality and generosity – Hilltop Village

Value	Situations where demonstrated	Teacher	Learner	Method of Teacher	Method of learner
Generosity	Money given in weekly church collection. Presents/food given at Christmas as 'Door Prizes'	Parents/ grandparents Elders, Church congregation	Younger generation	Oral instruction, models	Participates
	I was twice given rice by Ibu Laura as thanks	Older generation/ parents	Younger generation	Models	Observes, experiences

Table 105 Hospitality and generosity – Rainbow Village

Value	Situations where demonstrated	Teacher	Learner	Method of teacher	Method of learner
Hospitality to outsiders	Host family very welcoming and generous	Older generation	Younger generation	Models	Observes, imitates
Hospitality to friends and neighbours	Generous refreshments served at Home Meeting	Older generation	Younger generation	Models	Observes, imitates

Formal invitations to meals don't occur in these villages but food is always sufficient to feed whoever may drop in when the family are eating and you are always invited to join them. A place to sleep is always found, albeit on the floor in the main room of the house, but no-one minds. Whatever they have is there to be shared.

3. Independence

As previously stated, from a relatively early age, in year seven, at the start of secondary school, many Ngaju Dayak young people, who wish to continue their education, must leave home and move to a larger town or sub-district, staying either with relatives or acquaintances. In exchange for board and lodging and sometimes the school fees, the young person will be expected to take an important part in running the house, probably in a large extended family. Consequently they have to learn to be independent from an early age. In the past, often from a young age, children were also left to fend for themselves whilst parents went deep in the forest to make a living, as related to me by Nova when she and her brothers were young. Again independence and self-sufficiency at an early age were essential. It seemed also to breed responsibility, particularly towards younger siblings.

Table 106 Independence - One Ox Village

Value	Situations where demonstrated	Teacher	Learner	Method of teacher	Method of learner
Independence	Young children feeding themselves and younger siblings with no direction from parents. Taking responsibility to buy food.	Mother	Children	Models	Observes, experiments

Table 107 Independence – Hilltop Village

Value	Situations where demonstrated	Teacher	Learner	Method of Teacher	Method of learner
Independence	Children treated as adult members of community at funeral/wedding meals	Older generation	Younger generation	Models, includes	Participates
	Minimal intervention when playing – Diana	Parents	Children	Non intervention, given freedom	Experiments, experiences

Table 108 Independence – Rainbow Village

Value	Situations where demonstrated	Teacher	Learner	Method of teacher	Method of learner
Living independently from parents	Indu Ana's children taught to be independent from young age in order to leave home to continue education	Mother, Indu Ana	Indu Ana's children	Instructs, models	Observes, listens, experiments, imitates
	Indu Helen's eldest daughter moved into a hostel at 16 to continue her education	Mother, Indu Helen, experience	Indu Helen's daughter, Helen	Instructs, models,	Observes, listens, experiment, imitates
	Nova moved into a hostel aged 14 to continue education	Mother, Indu Nova, experience	Indu Raymond's daughter Nova	Models, experiences	Observes, listens, experiments, imitates

I watched with amazement as 3 year old Oly clambered up and helped himself to money from the till in their little shop only to return a few minutes later with a packet of instant noodles he had apparently bought with the money. Mother was down at the river doing her washing. When his older siblings returned from Primary School they fed the younger ones with no direction whatsoever from mother, although she had previously cooked the rice and vegetables.

There has been a lower secondary school within daily travelling distance from Rainbow Village since 1998, catering for school years seven to nine. Since 2002 there has been an upper secondary school for years ten to twelve. Nevertheless some parents still prefer to send their children to the schools in the towns and cities where they perceive the standard of education to be higher. Therefore some children from Rainbow village continue to live independently from their parents from as early as year seven onwards.

The hostels the girls move into require the students to be quite independent doing all their own cooking, washing and cleaning. They become part of the hostel community which also contributes to the learning process.

4. **Mutual co-operation** (*Gotong-royong/Handep*)

The ancient Indonesian practice of mutual self-help and co-operation is still practised to some degree among the Ngaju Dayak. Tasks are undertaken communally on the understanding that those who help with your project or task will expect you to repay the labour in kind, participating in their next task. Although this practice is increasingly being replaced by paid labour, there remain some tasks which are always undertaken communally following the ancient practice.

Table 109 Mutual co-operation (*Gotong-royong/Handep*) - One Ox Village

Value	Situations where demonstrated	Teacher	Learner	Method of teacher	Method of learner
Mutual co-operation (<i>gotong-Rayong</i>)	Mutual help with rice-planting (<i>nugal</i>)	Family	Children	Models	Observes, listens, participates

Gotong-Rayong is still practised in One Ox village when sowing rice. It is a major gathering and can involve up to forty five people, and all the food preparations associated with such occasions. There is a strong sense of obligation to help those who have helped you.

Table 110 Mutual co-operation (*Gotong-royong/Handep*) – Hilltop Village

Value	Situations where demonstrated	Teacher	Learner	Method of Teacher	Method of learner
Mutual cooperation	Grave digging – men turn out to help each other	Older generation	Younger generation	Models	Observes, participates
	At rice-harvest time	Older generation	Younger generation	Models	Observes, participates
Informal co-operation	Primary School teacher Dolly, 'if I go to the city for a few days someone else will teach my class – we all help each other.'	Older generation	Younger generation	Models	Observes, participates

I was told that mutual self-help and co-operation is still practised among the Ngaju Dayak people in Rainbow Village although no instances of it were observed. The following examples were given in interviews.

Table 111 Mutual co-operation (*Gotong-royong/Handep*) – Rainbow Village

Value	Situations where demonstrated	Teacher	Learner	Method of teacher	Method of learner
Mutual help & co-operation	Clearing and cleaning the dirt road	Older generation	Younger generation	Models	Observes, participates
	Weddings and similar celebrations	Older generation	Younger generation	Models	Observes, participates
	Funeral and death rituals	Older generation	Younger generation	Models	Observes, participates
	House building	Older generation	Younger generation	Models	Observes, participates

Formal Education

The opportunity for formal education for all is comparatively recent. Most of the grandparents interviewed had not completed primary school, and many of the parents had not completed secondary school. The present generation of school children have a much greater opportunity of completing a formal education. There seems to be some ambivalence in people's attitude to formal education. Hence the somewhat contradictory findings in the tables following. On the one hand formal education is seen as essential to make progress in the modern world and yet often parents fail to persuade their children of this fact and many still drop out of school. Some actively encourage their children to marry young and drop out of formal education. Others, though, encourage their children and the children are motivated and continue. Often parents seem to value education but do not have the financial means to enable their children to continue.

Table 112 Formal education - One Ox Village

Value	Situations where demonstrated	Teacher	Learner	Method of teacher	Method of learner
Formal Education	Concerned because difficult to get young people to continue formal education to higher secondary level	Village Head, Bp. Doni, parents	Children/ younger generation, Doni	Instructs, insists, facilitates, persuades	Resists, insists on own way
	Continuing education more highly valued by present generation of parents.	Parents	Children/ younger generation	Encourages, facilitates	Participates
	Valued by parents but unable to help children	Parents	Children/ younger generation	Encourages (but fails to persuade or lacks finance to enable)	Listens (but fails to participate)
	Dissatisfaction with standard of formal education	Parents, Mama Lena	Children	Complains, lack confidence in teaching	Listens
	T.V programmes	Programme producers	Children/ younger generation, parents	Visually displays, models	Observes, listens, absorbs
	Existence of positive role models in the community	Young people who have continued their education	Children/ younger generation	Models	Observes, listens
	Existence of negative role models in the community	Parents who dropped out of school but have made good	Children/ younger generation	Models	Observes, listens

The Village Head mentioned the difficulty of getting young people to continue their education beyond Primary/Lower Secondary level as the main problem of the village when asked. This is probably because his own, eldest son had recently dropped out of Vocational High School. The father had been keen that the son continue, but the son had other ideas. Father said, 'I bought him a motorbike to get to school but he used it to do other things' which included getting drunk and possibly taking drugs.

Formal education would seem to be more highly valued by the present generation of parents. The village head is a son of Mama Edwin, but he had not completed nine years

of schooling, yet he is keen for his sons to continue. Only one out of eight of Mama Edwin's children completed nine years of education. It was unclear whether this was because of lack of finance or lack of interest. She told me that they were '*kurang mampu*' usually meaning financially unable but then said that three of them, one boy and two girls, had been 'more interested in going out and enjoying themselves rather than learning'. In spite of that, or maybe because of it, of her twenty one grandchildren, mainly now living in the cities, Grandma and the parents hope that most of them will complete twelve years of schooling at least.

Bapak and Mama Yanti are proud that their eldest daughter, Yanti, 18 years, is at university. Their next child is at the upper secondary school, completing school years 10-12.

Table 113 Formal education – Hilltop Village

Value	Situations where demonstrated	Teacher	Learner	Method of teacher	Method of learner
Formal Education	Anton & Daud continuing their formal schooling	Teachers, Parents, Older generation	Children	Encourages, facilitates (send to school till year 9)	Observes, listens, participates
	Goal is to complete the course –pay if fail exams	Teachers, Parents,	Children	Models (older pupils)	Observes, listens, participates
	Ibu Laura had 12 yrs. formal education and wants the same for her children	Mother	Children	Encourages, facilitates, expects participates	Observes, listens, participates
	Mother proud daughter has a degree	Mother	Daughter	Encourages	Listens, participates in continuing education
	Disappointed sons didn't want to continue their education	Mother	Sons	Encourages, advises, exhorts	Listens, ignores advice
	Mother wanted to continue her education but her father died	Teachers	Ibu Wilson when a child	Encourages	Listens participates
	Mother taught children to read before kindergarten	Mother	Children	Models	Listens, imitates, practises, participates
	Mother distressed because no money for youngest daughter to go to university	Mother	Daughter	Explains, emotional involved	Observes, listens
	Books are valued for the knowledge they give	Colonial School Teachers	Mother	Encourages	Observes, listens, imitates, participates
	Ibu Bambi had 9 yrs school but children completed 12 yrs. Two cont. to higher ed.	Mother	Children	Encourages, exhorts	Observes, listens, participates

Table 114 Formal education – Rainbow Village

Value	Situations where demonstrated	Teacher	Learner	Method of teacher	Method of learner
Continuing formal education	All 7 Indu Joni's children continued to further/higher education	Parents, older siblings	Children	Encourages, facilitates	Listens, concurs
	All 5 of Indu Helen's children continued to end of yr 12. I continued to Higher Ed.	Parents	Children	Encourages	Listens, concurs
	4 of Indu Raymond's 5 children have continued to Higher Education	Parents, friends, older siblings	Children	Encourages	Listens, concurs

As in the other villages there seemed to be some ambivalence in people's attitudes in Rainbow Village to formal education. In theory formal education was seen as essential to make progress in the modern world and yet again often parents failed to persuade their children of this and many still dropped out of school. Others, though, encouraged their children and the children were motivated and continued.

In all three of the above families the value of formal education was being passed on to some extent. I was told that most parents in Rainbow Village had the financial means to enable their children to continue if they chose to but thirteen single boys still living in the village had all chosen not to go on to further or higher education although the majority had completed 12 years of formal schooling. When compared with the value placed on early marriage, it would appear that formal education was less highly valued than early marriage (cf. Table 80).

This completes the three sets of tables showing how skills, beliefs and values are being passed on to the next generation. The following two chapters discuss these findings asking firstly in chapter 8, why these skills, beliefs and values are being passed on and in chapter 9 drawing conclusions about how they are being passed on.

Chapter 8

Discussion of the Research Findings: Why Skills, Beliefs and Values are Being Passed on

Before proceeding to a discussion of the data from the previous three chapters on how skills, beliefs and values are passed on it is necessary first to consider the 'why' question. Many studies have shown a strong correlation between motivation and learning and the importance of the motivation of the teacher (e.g. Atkinson 2000, Skinner 1993). This in turn raises the question of what motivates the older generation in this study, to pass on some skills, beliefs and values and not others and why the younger generation is motivated to learn certain skills, beliefs and values and not others. Thus I now turn to examine each of the three domains seeking to establish reasons why they are being passed on and why some are being passed on formally or semi-formally rather than informally.

Skills

Why Skills are Being Passed on

One of the most important reasons for the continuing transmission of skills seems to depend on whether they are considered to still be relevant to Ngaju Dayak rural life in the twenty first century. Relevance was determined by whether they were necessary for survival, useful to ensure the smooth running of daily life, profitable financially or are part of the tradition of the elders.

Housekeeping skills, for instance continue to be passed on to succeeding generations because they are still important to women who will become wives and mothers and run their own households. The usefulness of all of these skills can be clearly seen, in the Ngaju Dayak areas where modern appliances, to assist in the running of the home, remain almost non-existent. If, for example, the wife is involved in subsistence farming or rubber tapping then it is essential for all the household to work together to accomplish the routine daily tasks.

Subsistence skills are still very relevant to the economy. Although more and more money is becoming available to the Ngaju Dayak people it is still vital for the family economy to plant rice and vegetables. Even in centres such as Hilltop Village which was larger and technically no longer a village, with more shops, schools and civil servants than the other two locations studied, it was still vital for the family and part of the tradition for many families to plant rice and vegetables.

Land is passed down as part of the marriage dowry and as such is sacrosanct, not being able to be sold (although there are exceptions such as Ibu Laura in Hilltop who had apparently sold her dowry field). It is handed down to the next generation and therefore some land has been in the family for many generations. The Ngaju Dayak have a special relationship with the land and have always lived off the rivers, the forest and the land that they have cleared. It is therefore considered by many to be a part of their 'Dayakness' to continue these activities.

Retailing skills are seen as very relevant. More roads are being built with the result that communications are improving and increased trade can happen in the villages and thus more profit can be made. On each successive visit to Hilltop village during 2007-2008 new small shops had opened in people's front rooms. Also with improvements to the road systems, there comes greater access to stores and supermarkets in the cities and so a greater perceived need for money to buy consumer goods. Skills, such as retailing, which are obviously relevant and have a clear use in the twenty first century are being passed on.

Why Some Skills are not Being Passed on

Those skills which are seen to be less relevant to the modern world were rapidly dying out while most income generating skills were becoming increasingly relevant in a growing consumerist society. Skills therefore fell into two categories, depending on their perceived relevance. This was demonstrated clearly by two of the different ways of earning a living in One Ox village where rubber tapping can be contrasted with making traditional crafts. The former is still a key means of earning money especially when the price of latex is rising. Hence the relevance of the skills is clear to the younger generation. By contrast the relevance of learning to make mats and baskets is far less obvious. Wona in One Ox explained why she was not interested in learning these particular skills:

It's boring. I can do a little to help my mother. This generation can buy them and lots of other people can make them. Also young people have money, more than their parents had when they were young. People also want things quickly. It takes a while to make a basket. They don't have time to wait for it.

A similar story emerged from Hilltop where skills that are still needed to provide food or that will earn money are being passed on such as rubber tapping, extracting and using the gold from the rivers, sewing, making and selling cakes. All these activities continue to thrive. However, although the traditional baskets and mats can also be made in the village and sold for cash, there is a decreasing demand for them in the light of other alternatives

and as these alternatives become more available the hard work involved in making the traditional variety becomes less and less attractive. It is seen as no longer a necessity: Further, with the opening up of roads to the villages giving access to a greater number of consumer goods from the towns, there are now many alternatives to the traditional materials. Articles which in the past could only be made by hand from traditional materials can now be bought relatively cheaply in the market, made from a variety of modern substitutes. In addition it is perceived to involve too much effort to make the traditional mats and baskets insofar as a great deal of time and effort is needed to collect the raw materials, prepare them and weave them. The younger generation are not prepared to spend time engaged in such tasks. Echoing Wona's sentiments above, Ibu Dani, in Hilltop talking about her children said, 'It's too difficult. They don't want all the effort'. Such a view provides an interesting comparison with the findings of Ohmagari and Berkes (1997) who discovered that some skills were being transmitted well by Canadian Cree Indian women although those skills that were no longer essential for livelihoods, were generally not. They describe how:

Some skills such as setting snares and fishnets, beadwork, smoking geese, and tanning moose and caribou hides were transmitted well. Many skills no longer essential for livelihoods, such as some fur preparation skills and food preservation techniques, were not (Ohmagari and Berkes 1997: 197)

Likewise traditional medical knowledge is gradually losing ground to modern medicine. In the past, in the absence of modern medical facilities and of formal learning, the received wisdom of the elders was vital for the health of the next generation. This continues to be true but to a much lesser extent. With the growth of, and increased access to, more modern medical facilities many of the young people in the village are refusing to use the traditional mid-wife, doubting the cleanliness and effectiveness of her methods and because they now have the alternative of a hospital trained mid-wife in their village or the next one, or in the hospitals in the city nearby. Indu Helen's seven-months pregnant daughter said:

The traditional midwives are old and forget. They don't use sterile instruments. Modern midwives in hospital are much better.

Why Some Skills are Being Passed on Formally and Semi-Formally Rather than Informally.

The handing on of numeracy and literacy skills is more complicated. On the one hand they are perceived to be important. It is recognised that globalisation and the modern

world demands a higher degree of literacy and numeracy and an increase in formal education. Patterns of livelihood are changing, as people, moving from strongly subsistence based economies to more cash based ones, demand new skills which are not able to be provided informally. With modern technology and a developing infra structure within the country, longer, more advanced, formal education becomes a possibility even in these remote areas. Likewise skills associated with their Christian religion, such as organising and leading Christian meetings, book-keeping and secretarial skills are also often taught in semi-formal workshops organised by the central committee of the church in larger centres or in the provincial capital. Consequently it is no longer the prerogative of the traditional agencies to pass on these skills, i.e. the family and local community. The responsibility for teaching these skills is generally abrogated to the professionals – the school teachers or the Christian clergy who are considered to have the training to pass on these skills. Nor are the methods the same – formal and semi-formal methods having largely replaced informal.

There are many possible reasons for this. It could be a perceived lack of ability on the part of the parents. Numeracy and literacy skills are often not being handed on by the parents to the next generation as the parents themselves have only limited skills in this area, or may be lack the self confidence. The reluctance to follow up or build on the teaching of school and church in the home would suggest either a lack of commitment to the task, or, more likely, a feeling of inadequacy on the part of the parents, feeling that the professionals are the people who are best able to do it, so the task is better left to them. The common answer from almost all of the women to the question: 'how are your children learning the Christian faith?' was 'I send them to Sunday School' or sometimes, 'through Christian Education lessons in school.' The existence of the professional means that there is an alternative to the parents in passing on certain skills, so whereas in the past Bible stories would have been told to the children in the forest hut, after dark, a number of the mothers told me they did not know or could not remember the stories. They considered it to be the task of either the Sunday School teacher or the Christian religious education teacher in school. The belief that it is the job of the professional to pass on these skills and the parents' perception of their own inadequacy to teach, often perpetuates the situation.

On the other hand, formal education is not necessarily delivering all that it sets out to deliver. Although the government decrees that all pupils must have nine years of free education, in practice not all achieve this. If, as often happens, children have to be educated in another location many cannot afford the living costs. Also not all parents see

the value of formal education. The headmaster and the headmistress of each of the primary schools in Hilltop village told me that parents didn't really appreciate the value of education. I visited Primary School 1, as it is designated, on a wet morning which had meant that only about half the pupils had arrived. The headmaster, Pak Clifford, proceeded to explain that the pupils were never all present:

because parents don't value education. They keep the children away from school to go to the fields and for all sorts of reasons. They themselves had very little education usually so they don't see the point of it.

Similarly Ibu Yenny, headmistress of Primary School 2 (there being two primary schools in the village) told me:

The children get virtually no help at home for their school work. The parents expect the teachers to do ninety percent of the teaching of their children.

However, the parents often considered that the quality of teaching was still rather low in many village schools often with a lack of commitment by the staff. In One Ox village Mama Lena complained about the quality of teaching. She recounted how her son often returned home from school early because his teacher had not come that day.

Likewise the centrally organised training programmes of the church often do not deliver what they are intended to deliver. The evaluation commissioned by the women's section of the GKE church synod (the central body) into the effectiveness of one of their training programmes concluded that for those attending 'it failed to have the maximum effect on the developing of the Women's Section of the churches'.

(kurang memberi dampak yang maksimal bagi pengembangan pelayanan pada Seksi Pelayanan Wanita gerejanya masing-masing.) (GKE c.2005).

In summary, skills which are still perceived by the younger generation to be relevant to life in the twenty first century are being passed on but the younger generation are not interested in learning those which they perceive to be no longer relevant. Literacy and numeracy skills and skills related to the running of the church are generally being taught in formal or semi-formal ways, and are not always being successfully passed on, possible because the situated learning model, so prevalent in informal learning of the Ngaju dayak people, is not transferred to the formal school situation or even to the semi-formal church setting.

Beliefs

Why beliefs are Being Passed on

The reasons why beliefs are being passed on is also complex. With beliefs it is not a question, as it was with skills, of just whether traditional beliefs are being passed on but rather *which* traditional beliefs: the beliefs of Hindu-Kaharingan, the adapted ethnic traditional belief or the relatively recent traditional Christian beliefs. Many traditional beliefs are being passed on even when they contradict Christian beliefs. One of the main reasons for this would seem to be the strong influence of the traditional Dayak world view. Even though all of the people I interviewed and the majority that I observed had converted to Christianity, their everyday actions remain strongly influenced by the Ngaju Dayak worldview. This is the lens through which the world is viewed and beliefs are therefore accommodated to this view. Examples of this can be seen in the belief that the dead are still able to be in contact with the living and are aware of all that is happening in this world and therefore their wishes must still be respected. Also it can be seen in the belief that the forces of nature can be controlled by the spirits of the 'unseen' world who therefore need to be placated.

A second reason may be the need for scapegoats. It is human nature to look for explanations or scapegoats when things go wrong and this is particularly so in a pre-scientific culture. The traditional beliefs give reasons and explanations which have satisfied generations of Ngaju Dayak people. When crops fail some explanation is needed and scapegoats must be found. If disasters and difficulties can be blamed on malevolent spirits then no human is held responsible and no further explanation is necessary.

Fear of something bad happening and the need to take avoiding action is a strong motive for traditional beliefs, particularly in the absence of modern medical science, where alternative cures and protection are sought. The fear of offending deceased parents and therefore being adversely affected by their spirit would appear to motivate many of the beliefs associated with death and burial and the fear of the unknown – the 'unseen' world inhabited by the spirits is also strong.

Ethnic loyalty is another strong motivating force. Loyalty to the customs of the ethnic group is deeply embedded in Dayak thinking. This is seen particularly among the older generation. Hence the comment by Mama Wona's eighty year old mother-in-law that she didn't know what it all meant but: 'you have to follow the tradition of the ancestors' Traditional ethnic loyalties are closely bound up with traditional beliefs and are extremely strong, often resisting the attempts of formal education, Christianity and the modern media

to change them. Hence in the fierce inter ethnic fighting which took place between the Dayak people and the Madurese people in 2001, many 'Christian' Dayaks reverted to their old ethnic religion with its beliefs in magic and occult practices, claiming that this was the religion of the Dayaks and that they were first and foremost Dayak and then 'Christian.'

Peer group pressure or fear of offending the living is another strong motivating factor. The 'peer pressure' of other relatives is very strong. The importance of 'not losing face' with other family members still provides an important motive for outwardly continuing the customs, although the degree to which the beliefs themselves are still held is less clear. This is particularly evident in the secondary mortuary rituals (Schiller 1997) which the Kaharingan religion deems essential to enable Dayak people to take their final place in the 'upper world'. For children to not carry out the ceremony for their parents or grandparents is regarded as extremely disrespectful. Therefore, even when the children have converted to Christianity, they will experience great pressure from other family members to conform to the customary norms. For many people though, it is probably more accurate to attribute their actions simply to habit. The customs are followed simply because they are habits. These things have always been done and are simply part of everyday life - and death.

A further and undoubtedly important factor in the consideration of why beliefs are passed on is the fact that Christianity does not provide a direct religious substitute for the needs that the traditional religion met. Christianity doesn't offer simple, mechanistic answers to the ancient questions of the Ngaju Dayak people. Thomson (2000) points out that the expectations which were met by the traditional religion of the Dayak people are not met in the same way by Christianity. The Christian religion to which many have converted does not guarantee good crops, good health and prosperity. Therefore when these things become of paramount importance to the people, the temptation is to revert to the 'old' religion which seemed to provide these assurances.

Thus it is that as with skills, the beliefs which are seen to be relevant today to the Ngaju Dayak women, are the ones which are being passed on. When someone in the next generation is not interested because they no longer see the relevance, the belief is no longer transferred, but when they are seen to be of vital importance to a member of the younger generation they are sought from, and passed on by, the older generation. Thus when Wona was pregnant with her second child having lost the first, she was very eager to follow all the traditional beliefs connected with pregnancy. However, she showed little or no interest in stories of ghosts and her mother had not intentionally passed on those

beliefs, although in the course of everyday living she had undoubtedly overheard a number of such stories.

Why Some Beliefs are Being Passed on Formally and Semi-Formally Rather than Informally

As with skills Christian religious beliefs are often taught in semi-formal situations, such as via the sermon or talk given in the context of a religious worship service. Whilst these happen regularly on a Sunday, there are often other times in the week when this semi-formal teaching takes place in a home, where the congregation gather for a worship service. This is particularly evident when someone has died and services are held in the home for a number of nights either side of the burial. The responsibility for teaching more often than not is in the hands of the professional clergy although 'more knowledgeable others' in the person of the church elders will sometimes give some teaching.

The reasons for using semi-formal methods rather than more informal ways is undoubtedly a legacy from the early missionaries who brought their German and Swiss culture along with their Christianity. According to records of catechism classes and church services in the early pioneer missionary days, very little seems to have changed in the way in which the Christian faith is being passed on (Ukur 2000).

The influence of formal education in altering beliefs would seem to be fairly insignificant in these particular villages, although because only a small minority of the women interviewed had continued on to further or higher education it is difficult to assess the possible effect of formal education on these people's lives. All the participants had had some primary school education.

Values

Reasons Values are Being Passed on

The reasons why particular traditional values are being passed on is also varied and complex. One of the primary influences is again religion – the traditional ethnic religion, the Christianity the people participating have converted to and the strong religious basis of

the Indonesian constitution. These all have a number of values in common. Thus in the area of family life and of marriage, religion plays a very important part. Within the traditional religion marriage and properly constituted marriage ceremonies and contracts were, and still are, considered to be very important. In the Christian religion, marriage is seen as a moral obligation for those who wish to have sexual relations. It is also deemed to be such according to Indonesian law. In the strongly religious, 80 per cent Muslim, society of Indonesia, where the first of the pillars, or principles, underlying the constitution is 'belief in One God', the institution of marriage as a religious ceremony continues to be very important. No provision is made for co-habitation or other models of family life other than the traditional husband-wife-children model within the largely Muslim Indonesian society. Because sharia law does not obtain throughout Indonesia, only in the province of Aceh, Muslim men also are only legally allowed one wife.

The importance placed on the family within the socio-economic structure of Ngaju Dayak society is another strong reason for family life continuing to be so highly valued. The traditional family is highly valued because the Ngaju Dayak social-economic structure means that life is hard and to be a single woman, or a single man, is very difficult in the hostile natural surroundings which form the backdrop to Ngaju Dayak life. Work is heavy and back-breaking and it is acknowledged that some tasks require the physical strength most commonly found in men. For example, as stated previously, women never used a chain saw in any of the villages I worked in. This was considered to be men's work. However, very few tasks were assigned exclusively to men or women. Within a marriage there were a great number of tasks which were shared and, whilst some tasks were seen primarily to be the domain of one particular gender, the other would often help out as in the case of the men child minding or helping with the cooking, or the women chopping wood and transporting huge blocks of latex. The stories which were told to me of single people, both men and women, were all concerned with how difficult it was for them to fulfil the tasks of daily living on their own. When I asked Mama Lena in One Ox village how she felt about Ngaju Dayak women who didn't marry she replied:

We feel everyone must marry. It's not good to see someone on their own... They have to work really hard. The work here is heavy. Mostly work in the forest. They are not capable of doing heavy work.

I asked Mama Ray the same question and she replied:

Aduh! [exclamation] According to me, my feeling is they must marry. That's me. If I see Dayak girls like this, already thirty years old, not married, aduh! I feel really sorry for them, like that.

When I asked why they had to marry, she continued:

I am afraid they won't have descendents. What about when they are old? That's my opinion.

With no social security provision for old age it is the children who are expected to look after their parents and provide for them when they can no longer work. Subsistence living by definition precludes the possibility of saving for the future. Your children are your investment. There is also an expectation that older siblings will provide for younger ones, thus easing the burden on the parents.

The continued high value placed on the extended family, the importance of producing children to continue the family line and to look after parents in old age, and the lack of alternative occupations all contribute to why marriage continues to be so highly valued. It is why the family continues to be the basic social and economic unit within society long after the custom of communal living in the long-houses has been abandoned. Tradition and necessity go hand in hand to ensure that the value of the family will continue to be passed on to succeeding generations for the foreseeable future. Dayak people have always married and married off their children. It is the 'natural' thing to do. To be single is strange and unnatural and to be pitied according to the Dayak people, hence comments I received from Bapak Wona that as a single person 'you have no future'.

The traditional Dayak worldview is a further important reason why traditional values continue to be passed on. Ngaju Dayak society is founded on the beliefs of the ancestors who are respected and honoured. As stated earlier, in the ethnic religion, the children are responsible for carrying out secondary mortuary rituals to ensure that their parents can enter into their final resting place in the unseen 'upper' world. Although many Christians no longer perform these ceremonies the sense of obligation to parents, even after they have died, is still very strong.

The way in which Christians seek to continue to show this respect for the dead is also governed by tradition. I frequently tried to discover the reason for many of the traditions now associated with Christian deaths and funerals such as the body never being left unattended by some member of the family, day and night until burial, or an umbrella being placed over the coffin and over grave to protect the deceased from the sun and rain. The

answer I received most frequently from the Christians was either that it was tradition and they didn't know what it meant or that it was to show respect to the dead.

Tradition plays an extremely important role in every way in the lives of the Ngaju Dayak people. Tradition governs the way the younger people treat their elders, and so because respect and honour has always been given to older people it continues to be so. Talking about marrying young, Mama Edwin said:

What can you do? I didn't feel ready to marry but you can't disobey your parents.

Mama Lena, talking about pregnancy taboos said:

If we don't follow our parents instructions then we blame ourselves.

And Bapak Lena told me:

My father made me read the whole Bible until I finished it. Because I respected my father, I obeyed him. You have to obey your parents.

Basic survival is yet another reason for the passing on of traditional values. The demands of a potentially hostile environment, the forest, which remain the focus for both subsistence and cash crops, means that much parental time and energy is taken up by these demands and children have to quickly learn to help and to play their part with minimal supervision. Independence is therefore needed for basic survival for children having to fend for themselves at a young age. In a society that still employs traditional farming methods, mutual co-operation is also essential for survival. These methods are labour intensive and it is vital to work together to get a task done. For the present, therefore, the time-honoured mutual self help custom of *gotong-royong* or in Ngaju *handep*, remains an essential part of Ngaju Dayak life. Community help, generosity and hospitality are all integral values in a society that is group oriented rather than individualistic. There is, however, a huge feeling of obligation to work for the people who have worked for you. Marty, in One Ox village went off day after day, helping in other people's, following the planting of his in-laws rice fields, where all the neighbouring farmers had joined in. He explained to me that he had to go and help them, it was expected of him and it was right. Ibu Laura in Hilltop had been helped by a friend in harvesting her rice and she too felt under obligation to return the favour. The whole system depends on this happening and thus the expectation of the group is very high. With the gradual move from a subsistence life-style to an income generating economy the need for this will undoubtedly decrease and people will be paid to do the work. Nevertheless Ibu Laura has little spare money and told me that she had paid for the

traditional basket in which she collected the rice and all her vegetables from her fields, by working for two days for the person who had woven it for her. Thus things move slowly in the Ngaju Dayak forests of Central Kalimantan and it seems that for the foreseeable future *gotong-royong* and similar customs will continue to be valued and passed on.

Peer group pressure is another strong reason why values continue to be passed on. Pressure from the group encourages the individual to conform to the group norms. For example it is very difficult to stop the spirit of 'competition' amongst the families hosting the Church House Meetings, where it becomes almost 'obligatory' to provide at least as good a meal, if not better, than the previous hosts, even though the current hosts can ill afford the expense.

Originally the younger generation needed first and foremost to learn how to survive in the hostile environment of the forest. Now they need also to learn how to adapt to the sometimes equally hostile world of the city. While there is still the need for young people to move to the towns and cities to continue their education at secondary school level, the need for being independent of parents from an early age will continue.

Why Some Values are not Being Passed on

Although in theory traditional values continue to be passed on it was clear from observations that some of the values are becoming strained by the pressures of modern life. For example, obedience and respect for parents and harmony are still highly valued in theory but in practice these may be beginning to break down. Although still said to be valued highly, the modern, younger generation is showing less and less willingness to follow the commands or wishes of their parents, as in the case of Doni, the son of the Village Head, who refused to continue his education. He looked instead to the example of his father who had also dropped out of school but has made a good living from the forest and become the Village Head. Doni's father claimed,

they [the young people] are spoilt by the forest. [*dimanjar oleh hutan*]. They think they can get a living from the forest so why bother with school?

Hence in spite of parents' wishes that their children continue their education and 'better themselves' – as the parents often perceive it, the tradition of their elders in gaining a living from the forest with no formal training reduces the motivation of some young people to continue their education.

The increase in the availability of electricity and the opening up of roads have brought new influences into the lives of the young people. Even in One Ox village, where mains electricity has not yet reached, the majority of homes had satellite dishes, televisions, DVD players powered by family generators. New patterns of behaviour are seen on the screen, often conflicting with the traditional Ngaju Dayak values. Television has opened their eyes to a 'new' and modern world, but this has had both positive and negative effects. On the positive side children are able to see the value of education but on the negative they are bombarded with a materialism hitherto unknown, entertainments and diversions, both legal and illegal, that are very attractive to the modern Ngaju Dayak young person. Young people have their horizons widened even without venturing out of the village, and some changes in traditional values seem inevitable.

Peer group pressure is also taking its toll on traditional values. Drugs, alcohol and gambling have become an increasing problem among the Ngaju Dayak young people and the pressure from peers to conform and experiment with these is often impossible to resist, especially when the young people are away from home and outside the influence of the family as in the case of Doni in One Ox village who had to move to the city in order to go to Lower Secondary School in year 7.

Formal education would seem not to have been a major agent for changing values but where possible it does seek to strengthen and enforce them. The values of the school and the values taught through stories and instructions in the official national school curriculum uphold the traditional Ngaju Dayak values. I was shown a series of story books for primary school children, with stories from all over Indonesia, all of which had a 'forward' by the author explaining the moral lessons of the stories to the teachers and pupils. For example, in one book for young children about animals helping one another and entitled '*Friendship Between Two Animals*' (Sukadi 2003: iii), was written,

If the cats and the dogs could become friends, why must we always quarrel with our friends? The cat and the dog put us to shame! Let us be friends with everyone. (My translation).

(Kalu kucing dan Anjing saja dapat bersahabat, mengapa kita harus bertengkar dengan sesama teman? Malu dong sama Kucing and Anjing! Mari kita jalin persahabatan dengan siapapun. (Indonesian original)

In another story for slightly older children entitled '*Honesty is the key to Success*' (Setiawan 2003: iii), it said:

A person of noble character doesn't find it difficult to adapt to his/her surroundings because a noble character, if combined with faith and piety towards the one who is

All Powerful over the whole universe, is more important than anything else. (My translation)

Seorang manusia yang berbudi pekerti luhur dan mulia tidak akan sulit untuk beradaptasi dengan lingkungan sekitar. Sebab keluhuran budi pekerti ada di atas segalanya jika disertai keimanan dan ketakwaan terhadap San Penguasa jagad raya ini. (Indonesian original)

The weaknesses in the educational system make delivery of some of these values difficult. What the children are reading and hearing through stories such as the ones above about friendship, honesty, hard work and similar values, and the apparent lack of commitment by teachers to teach the young people is clearly sending mixed messages to both pupils and parents. Mama Leni particularly expressed dissatisfaction with the school system, possibly because she herself was one of the few in her village who had gone on to Further Education. She complained of poor standards of teaching and lack of commitment by teachers who often didn't even turn up to teach. She said:

There are two primary school teachers from One Ox village who have come back here to teach, but they have also opened a shop so they don't have time to teach properly. Often my son comes home saying his teacher hasn't turned up.

An ambivalent message as to the value of formal education is clearly being given.

Why Some Values are Being Passed on Formally and Semi-Formally Rather than Informally

In spite of the perceived weaknesses in the formal education system, some parents clearly value formal education and learning and want to pass it on to the next generation, albeit indirectly via the professional. Some value it for its own sake such as Ibu Wilson who: 'values books for the knowledge they can give', as did each of the three main participants in Hilltop District who enjoyed reading and were keen to obtain books, which they subsequently read. Parents such as Mama Leli above and Indu Ana in Rainbow village were keen to see their children progress and have a different future from their own and their ancestors. In Hilltop village, where there was both a lower and higher secondary school I was told by Ibu Anton and her sons Anton and Daud, of friends of theirs and their parents who seemed to value formal education more for the prestige it gives or the job security it offers. Thus the 'piece of paper' e.g. the school leaving certificate, the diploma or degree were more valued than the formal learning or knowledge and skills that they are purported to represent. Consequently gaining these is often through unconventional

methods such as paying the teacher so that the child can progress to the next class and paying to 'pass' exams, which is not just confined to this village but is common practice throughout Indonesia as witnessed in numerous newspaper articles and reports on television each year of what is clearly understood by the authorities as cheating, occurring or being attempted, during national school exams and university entrance exams. Among many examples given at village level, Ibu Anton and Anton and Daud, talking about their lower secondary school in Hilltop village, pointed out that:

If you don't pass your exams but still want to go up to the next class you can pay Rp.1,000,000 [= about 60 UKP 2008, equivalent to the teachers monthly salary].

Anton continued:

Most pupils finish lower secondary school (*Sekolah Mengengah Pertama- SMP*) [to year 9] but very few go on to higher secondary school (*Sekolah Mengengah Atas*) in the village [yrs.10-12] because it is so expensive. It costs Rp.1,000,000 entrance fee and Rp.30,000 a month, then if you don't pass your exams you have to pay to go up to the next class. Many pupils leave after SMP.

Valuing the outcome of education rather than valuing it for its own sake accords with the conclusions of Tweed and Lehman (2002) who cite this as an example of one of the differences between culturally Chinese and culturally Western learners. Ngaju Dayak learners are clearly following the culturally Chinese learners in this aspect.

A further difference of perception relating to the value of education was seen between the opinions of the school teachers on the one hand and the parents on the other. The school teachers complained that the local parents didn't value education as in the examples previously cited where the headmaster and headmistress felt that the parents did not send their children to school regularly or help them with their school work. On the other hand, to time-task-orientated western observers, there appear to be a number of things that call into question the extent to which the teachers themselves value formal education. For example time is very loosely adhered to, lessons virtually never started on time as in the field note entry below:

Visit to Primary School 2. I arrived at 7.30a.m. the time I had been told school began, to find only about half of this schools 13 teachers had arrived but no one seemed to worry.

On another occasion

the teachers stopped on the way to their classrooms, after the starting bell had rung, to buy their vegetables from a local woman who had come into the school grounds to sell her wares.

Also the time honoured principle of mutual self-help was extended to the task of teaching, so that when I asked Dolly what would happen to her class if she went off to the city, she replied,

if I go to the city for a few days someone else will teach my class – we all help each other.

Relational values are more highly valued than task orientated ones. If something else 'crops up' then it is not unusual for a teacher to just not show up with no explanation given, and everyone will assume something more important has occurred. Thus whilst in a rapidly developing world, education will continue to be valued by the future generations, its value may be rather reduced in the minds of the recipients partly because of the way in which it is delivered. It is valued to some extent by the parents but there is some ambivalence in their attitudes, with other values such as marriage and the importance of family life sometimes superseding it.

In summary skills were being passed on if they were considered relevant, that is either necessary for survival, useful to ensure the smooth running of daily life, profitable financially or were part of the tradition of the elders. Beliefs were passed on if they were in accordance with the traditional worldview and were seen to still be relevant in today's world, sometimes motivated by the need to control the elements or find a scapegoat, sometimes out of fear and sometimes because of ethnic loyalty or peer group pressure. Religion, the traditional worldview and the tradition of the elders are major sources of the values the people hold. Basic survival needs and the socio-economic structure of Ngaju Dayak society, together with strong peer group pressure ensure that the basic values continue to be upheld and passed on for the foreseeable future. The increasing role of formal and semi-formal ways of teaching and learning is influencing to some extent the way in which some skills, beliefs and values are passed on.

Before considering the implications of this for Christian education among the Ngaju Dayak people, and ways forward, it is necessary to see the composite picture, summarising how teaching and learning in all three areas of skills, beliefs and values, are taking place. This is examined in the following chapter.

Chapter 9

HOW SKILLS, BELIEFS AND VALUES ARE BEING PASSED ON

This chapter seeks to summarise what this research has shown about how the Ngaju Dayak Christian women, pass on their skills, beliefs and values to the next generation and compare these findings with what other research has shown about how indigenous people in other places teach and learn. In doing so I draw on theories of learning which support the findings and return to the original motivation for the research, which was to try to help the Ngaju Dayak Christian women understand and grow in their Christian faith by having a clearer and more effective understanding of the Bible. It is my contention that the methods used in Christian education among the Ngaju Dayak people have generally not been consistent with the most appropriate methods as they have emerged from this research and have not always been successful.

A number of similar points emerge across all three of the domains concerning the ways in which rural Ngaju Dayak Christian women pass on their skills, beliefs and values. One of the key findings was that nearly all transmission takes place informally. It is part of the everyday life of the people, a finding similar to that of Omolewa (2007) who reported that African education is generated in the communities and is a way of life. In light of this it is helpful to consider the findings under the two main headings of informal methods of teaching and learning and formal/semi-formal methods of teaching and learning.

Informal Methods

From further immersion in the data the following eight themes emerged as significant indicators of the ways in which skills, beliefs and values were being passed on informally.

- 1. Parents as teachers - the older generation to the younger, usually the parents – more often the mother to the children.**
2. Teaching by modelling and demonstration.
3. Learning through observation, listening, experimenting, participation and imitation.
4. Teaching and learning in a real and meaningful environment.
5. Teaching and learning within the context of the family.
6. Teaching and learning in inclusive situations where children were present.
7. Teaching was oral, visual and kinesthetic.
8. Minimal gender differentiation.

1. Parents as teachers

Across all three domains the parents emerged quite strongly as the 'teacher', closely followed by other family members. The parents clearly have a dominant role in teaching the younger generation with mothers generally spending more time with the children and as such they appear to have a greater influence over all in the children's lives (cf. Hill and Freeman 1998).

In all three villages parents were the main channels for passing on housekeeping skills, both washing and cleaning, cooking and catering and domestic animal husbandry, with other adults, such as aunts and sometimes grandparents, also playing a part. In Hilltop village, for example, it was always the mothers whom I observed doing the washing and general cleaning and so passing on these skills to the younger generation (see Tables 9, 10, 11, 12, 13).

Both parents were involved in teaching children the subsistence skills (see Tables 14, 15, 16). In One Ox village fathers (*bapak*) were almost as involved as the mothers in passing on subsistence skills as the parents worked together on them (see Table 14). The current generation of parents had learnt these skills from their parents and were now passing them on to their children.

With income generating skills (see Tables 17, 18, 19, 20, 21, 22) parents were again the key to passing on these skills. In passing on the rubber tapping skills both parents are often involved. From an early age the children accompanied their parents and learnt from them. In obtaining gold from the river, (see Table 19), sometimes the whole family would be involved, living in a temporary hut on a platform over the river whilst they were working. Children were also taken along by parents to collect other forest produce (see Tables 20, 21). The mothers were more often involved in the small scale retailing (see Table 18) and so it was they who were passing on these skills to the children who were always present as the shop was generally the front room of the home, and children were expected to help the parents.

In the area of child rearing skills (see Tables 23, 24), which were considered from the two areas of physical and social development, similar patterns of teaching and learning were observed. In passing on skills related to the physical aspects of child rearing such as nursing, bathing, feeding, the parents or grandparents were very prominent in performing

and passing on these skills. Social skills were also passed on as parents modelled behaviour and included the children in their activities. The natural inclusion of children in almost all adult activities and living in extended families or in close proximity to the wider family where daily interaction was the norm was an important tool in the children's social development.

In spite of the presence of modern medical facilities in, or accessible to, all three villages, the passing on of traditional medical knowledge from parents to children, was continuing (see Tables 25, 26). Parents were the main source of information regarding which plants to use for medicinal purposes, and where to find them and how to prepare them. The wider community, however, would freely pass on advice when necessary. Chewing betel nut was largely the domain of the grandmothers although a number of younger women were also engaging in the habit.

In the beliefs domain it was mainly the mothers or grandmothers who passed on their beliefs to their daughters and grand daughters about pregnancy and birth (Tables 38-47). In the other beliefs studied, it was often also the fathers or other older members of the family or community who were responsible for passing on these beliefs as can be seen in many of the beliefs tables concerned with death, burial and the after-life; spirits, omens and other supernatural phenomena as well as beliefs about ensuring subsistence, where 'older generation' or 'parents' are frequently the teacher (see Tables 48 – 61). The beliefs were passed down from the older generation to the younger in line with the value placed on age and seniority by the Ngaju Dayak people.

In the same way, grandparents and parents were passing on the traditional values to the younger generation, in accordance with the Ngaju Dayak's respect for one's elders. The older generation provided the example and the younger generation observed and absorbed what was going on (see Tables 80-111). Regardless of their own level of education or more likely because of the awareness of the limitations of it, many parents were keen to impress on their children the value of education (see Tables 112-114).

The main exception to the parents being the teachers was in the area of sport. Sports skills, volley ball and badminton, were generally being passed on informally by the peers of the village young people, rather than the parents (see Tables 27, 28, 29).

2. Teaching by modelling or demonstration

When skills are being passed on very little explanation seems to be given and the learner is expected to observe, experiment and imitate. This agrees with studies reported by Barnhardt and Kawagley (2005), where they recount the story of how an Alaskan (Inupiaq) native elder and his brother had been taught by their father to hunt caribou by carefully watching and coming to understand the relationship between the father and nature. This is similar to much of the skills learning that takes place among the Ngaju Dayak people. For example when I asked Mama Lena from One Ox village how she had learned to plant and harvest rice, she replied, 'From our parents. We followed them and watched.'

Housekeeping skills were rarely consciously taught to the children although one or two women did express a desire for their children to be independent and able to look after themselves and so were concerned that they learnt these skills at a relatively early age. The teaching took place as the parent, with the skill, usually the mother, modelled this in her daily work and expected the active help and participation of the child. For simple tasks this was expected from primary school age but most tasks were expected to be performed by children from around the age of twelve years (see Tables 9, 10, 11, 12, 13).

With subsistence skills, the parents would model the activities to the children as they carried out their daily tasks, not consciously teaching them but showing by their example. The expectation was that in due time the child would make a contribution as they grew, learnt and became part of the work force (see Tables 14, 15, 16).

Whilst the same method of demonstrating and expecting participation from the learner was evident in the passing on of all income generating skills, in the case of rubber tapping more specific practical guidance was often given in the form of the 'teacher' taking the hand of the learner and guiding them down and across the bark of the tree, possibly because failure to carry out this procedure correctly could lead at worst to killing the tree and at best to the yield being greatly diminished (see Table 17). Other income generating skills also revealed some instructions sometimes being given e.g. in Table 19 where advice about extracting gold is given by an uncle and in Table 18 where the mother, Mama Yanti, gives some instruction on book-keeping to her children.

Child rearing skills were being passed on to the next generation of Ngaju Dayak Christian women mainly by modelling. Parents and siblings were the main carers of young children

and they appeared to have learnt their skills through the modelling of them by their elders. They in turn were passing them on in the same manner.

In the passing on of traditional remedies, some instruction was given as to what plants to use for which diseases or medical problems and the young people would be shown where to find the plants and which they were to use as is seen in Table 25. In Table 26 it can be seen how the older midwife teaches by carefully observing her pupil and advising as necessary.

In the category of recreational skills, the sports skills are being passed on by modelling and example rather than by instruction (see Tables 27,28, 29). The same principle applies to the chewing of betel nut, which can be seen in the same tables, as the older generation model the activity to the younger generation.

In the beliefs domain, unconscious modelling was apparent as rituals were enacted and the younger generation would learn the underlying belief from the action of the older person performing it, e.g. when a bag of clothing was lowered into the grave with the coffin, implying a need for these in the after-life (see Table 48).

The values which are important to the Ngaju Dayak people are as much 'caught' as 'taught'. Respect is demonstrated in the attitudes of parents towards grandparents and older people in general. Harmony is also more often demonstrated than talked about. Apart from some semi formal verbal instruction given by the church about marriage and family life, all of the community values appeared to be passed on unconsciously by example. Concerning the value placed on education, role models, both negative and positive made an impression on the young people.

At the end of the first decade of the twenty first century television and video also model and demonstrate skills beliefs and values to the younger - and older - generations. Nearly every home has access to television, powered by their own or a neighbour's generator, a satellite dish beaming programmes from around the world and a DVD player to watch all the latest films. The media undoubtedly influence the ways in which skills are being passed on but probably even more pervasive is the influence of the media in affecting beliefs and values. Young people are exposed to values and beliefs which are completely alien to their own traditional systems but which are modelled to them daily via the media .

There is a great deal of repetition in the passing on of skills, beliefs and values. Skills are modelled daily and seasonally. Implicit beliefs, passed on in rituals associated with the cycle of birth, marriage and death are regularly repeated and instruction and modelling of values are constantly repeated both implicitly and explicitly.

3. Learning through observation, listening, participation, imitation and experimenting

As a corollary to the unconscious modelling and demonstrating by the teacher, the learners' chief ways of learning are to observe, listen, participate, imitate and experiment. In and around the home, in the forest and fields and on the river, the children observe all that is going on. Even in the case of learning how to tap rubber trees, where it has been seen more specific guidance was often given, observation was still expected. In Hilltop village for example, Ibu Anton was asked how she had learnt to tap rubber trees. She replied that her parents had shown her and her sisters once, when they were already adults and had said to them:

Surely if you are married and have children you must know how to tap rubber trees. You must have seen how other people do it. Now go and do it yourselves.

Likewise with subsistence skills, children were taken along to the fields or to the rivers from an early age and they observed and absorbed all that was going on. Very little, if any, verbal instruction was given. Gradually the children were absorbed into the working community and are expected to make a contribution – always with adults around to guide them (see Tables 14, 15,16). This is very much in line with Rogoff's (1990: 8) idea of 'guided participation' where 'guidance and participation in culturally valued activities are essential to children's apprenticeship in thinking'

Children, from an early age, would be present when the parents, particularly the mother was carrying out the housekeeping skills. They learnt as they observed and imitated their parents. As they grew older and were expected to play their part, they learnt as they participated in the activity as part of the family group (see Tables 9, 10, 11, 12, 13).

Child rearing skills were being learnt in the manner which they had been taught to the parents, that is by observing the skills of their parents, aunts and older siblings as they modelled them and through the expected involvement of the children in these tasks.

Whilst instruction would be given as to what plants to use for which diseases or medical problems and the young people would be shown where to find the plants and which they were to use as is seen in Table 25, observation, participation and imitation also played a role in the passing on of traditional remedies. In Table 26 the midwife had learnt by observing, participating and imitating the older, experienced midwife, in this instance, as is very often the case, her mother.

In the recreational skills, sports skills were being learnt by the younger generation as they observed and participated. They learned to chew betel nut in the same way as they observed and imitated their elders (see Tables 27, 28, 29).

This is all very much in accord with the “hands on” approach within the context of daily living and working reflected in the research reported by Ohmagari and Berkes (1997). They found that about half of the 93 bush skills they were studying among the women from two Cree Indian communities in Canada, were being passed on at the “hands on” learning stage.

McLean’s (1997: 20) work among the Alaska native parents found similarly that ‘parents exposed the child to skills at an early age, modelled skills, and encouraged the child to watch them’. The Ngaju Dayak were passing on these skills in a very similar way to other indigenous peoples.

In the beliefs domain the same methods of learning through observation and listening are witnessed in the lives of the Ngaju Dayak children who were observed listening to and trying to remember the beliefs and anecdotes the parents were re-counting to me. When one mother was asked if she had ever specifically told her children these beliefs concerning the spirits, she answered that they probably knew them as they were always present when they were discussed and indeed were present as this particular conversation was taking place. When they were observing rituals the method of learning was usually through listening and observing the older generation and then carrying out or participating in the particular ritual concerned with that belief. What they had heard they tried for themselves and absorbed into their own belief system (see Tables 38, 39, 40).

Because values are largely ‘caught’ rather than ‘taught’ there was an active observation and listening stage on behalf of the learner. Respect and obedience to parents is observed being modelled daily in the home and similarly other values are observed and internalised. Children listen to what is being said, interpret the symbolism they see enacted and, because they are involved in the community, have early opportunities to participate themselves. Ngaju Dayak children, like most other children throughout the world, would listen and observe and then, would sometimes ‘test the boundaries’ by disobeying as far as they could until they had established what the standards were.

However, in the values domain tables, it was noted that words such as instructed, advised, teach, tell, were more frequently used by parents explaining how they passed on these values. Indu Ana in Rainbow village, when asked how she passed on her values to her children clearly saw the value of her children both being told what to value but also of observing the example of the older generation. She replied:

Teach them and advise them. By the parents being a good example in their work and the home, the wife not fighting with her husband, going to church and reading the Bible.

4. Teaching and learning in a real and meaningful environment

Informal teaching, by definition, does not take place in the rarefied atmosphere of the school classroom. The teaching and learning of the traditional skills, beliefs and values took place in a real and natural environment. Because the housekeeping skills were part of the daily routine of life and essential for the well being of the family, this provided a meaningful learning environment for the children where what they could be seen to be of use and to have value. In Tables 9, 10, 11 and 12, the teaching/learning location is always the home or the area surrounding it. In the case of passing on subsistence skills, the learning environment is a real-life situation where food has to be grown or fish caught if the family is to eat (see Table 14, 15, 16). The cutting down, burning, sowing and reaping all took place in the field; the ritual to ensure that the rice will produce in abundance took place in the field. Thus these learning tasks also have meaning and value. Virtually no theoretical learning takes place 'off the job', it is all carried out 'on the job', in the field, river, plantation or 'shop-house' (see Tables 17, 18, 19, 20, 21, 22).

Child rearing skills are all learnt as the parents and older siblings have to care for the younger children. The situation is a part of daily life and as such is a very real and meaningful context for learning (see Tables 23, 24). The practice is important, not the theory. Likewise in the case of knowledge of traditional remedies (Table 25, 26) which would usually only become apparent when the need arose. Hence I learnt that Wona's father in One Ox Village was very knowledgeable about the treatment for a twisted knee only when this injury occurred.

The real and meaningful context for learning was further enhanced by the fact that children were included in every celebration, ritual and activity that I witnessed. To my knowledge they were only banned from being present at child birth. While they therefore learned to cope with illness, death, dying and grieving, they also learned to rejoice when

people married and babies were born. They were part of it, they shared the experience and to some extent 'owned' it. Against this background, respect for parents and elders was expected in and around the home as well as throughout the community.

5. *Teaching and learning within the context of the family*

Multi-generational families were not unusual, and even when all the family members were not inhabiting one dwelling, grandparents, aunts, uncles, cousins, nieces and nephews were very often living next door and across the path – all in close proximity to each other. Tasks were shared between parents and aunts and uncles, the care of younger siblings was shared by cousins and everyone appeared to be very much part of the family. Old people were almost always cared for within the family. The value and importance of the family was evidenced by strong family loyalty and mutual responsibility, for example in the way older siblings would often see it as their duty to obtain paid employment as soon as possible in order to help their family financially and enable younger siblings to continue their education. In Nova's family in Rainbow village her parents, older brother, sister-in-law and baby daughter lived together. The parents had been helped financially by the older son so that they could open a small shop in front of the house. I witnessed each of the eight adult members of the extended family helping in the shop at different times. Nova, the second child, had continued her education through university and had become a school teacher. She then helped the younger three siblings through university. Nova herself was then helped by the oldest brother, who enabled her to extend a tiny house the government had made available for purchase by newly qualified teachers. Everyone took time to help with the grandchild at different times.

Housekeeping skills were nearly always taught and learnt within the context of the family home and by the mother or sometimes an aunt, grandmother or other older adult who was familiar to the child (see Tables 9, 10, 11).

All of the family were usually involved in the cultivating of the fields and so this learning also took place within the context of known adults with whom the children had a close relationship. Fishing with a simple home made rod and line is often undertaken by mothers and children, though sometimes individuals choose to fish with their friends (see Tables 14, 15, 16).

Because the whole business of generating income is a family one and is undertaken for and by the family, then the learning of the necessary skills also inevitably takes place within the context of the family. Mother, father or another close relative would almost always be the teacher. Selling in the *warung* (small shops) in the front of the houses is

usually a family enterprise, mainly undertaken by the women, with the children looking on and learning. They are expected to help out whenever the need arises. Thus in the examples above the skills are passed on from mothers to daughters and to daughters-in-law in the context of everyday work involving both the nuclear and the extended family. (see Table 18 above).

All passing on of child rearing skills takes place within the context of the family, either the nuclear family or more usually the wider extended family. (see Tables 23, 24). Likewise each of my participants was passing on their knowledge of traditional remedies to their children in the context of family life and everyday living. (see Table 25).

The family and village was also the context for learning and teaching beliefs. This learning took place within the confines of relatively small villages where, certainly in two out of the three places everyone knew everyone else. The younger generation were able to witness the older generation carrying out many of these ceremonies connected with the beliefs and avoiding the taboos, often within the family home or fields and always within the village. Rarely was there a specific or special place for the learning to take place, as can be seen from Tables 58, 59.

Once again the only exception was with recreational activities where the context for learning was usually wider than the family and in the case of sporting activities involved the whole village. Chewing betel nut would most often take place sitting in the front room of someone's home where any members of the village might be gathered, not necessarily just the family.

6. Teaching and learning in inclusive situations where children are present

As frequently noted, children were ever present. They were around in the house when stories about beliefs concerned with pregnancy and birth were being shared, they were never barred from any death and burial ceremonies and so observed and heard all the traditions (see Table 49). They were always present when stories of the supernatural were being passed on and so heard and absorbed those too. Values were taught and learnt within the family and in the village. They were the shared values of these communities and of the families that make up the communities. The sense of community within each village was strong and the children were clearly part of it.

7. Visually, orally and kinesthetically transmitted

Unconscious use of visual aids is also used frequently. Beside the visual nature of the manual skills the rituals were often graphic visual enactments of beliefs, such as the elaborate refurbishing of the grave of the ancestors or the placing of a lighted candle or lamp to keep guard over the buried placenta. The use of these artefacts and symbols in belief rituals enabled the younger person to see what was happening and to remember vividly, e.g. when a chicken was killed and blood smeared on the rice before planting. (see Table 58).

Other visual methods included the television, where beliefs and especially values were now being passed on via this media. The example of the obedient child being the good role model comes across in many popular, Indonesian produced, television programmes. For example, the parents tell the children education is important but also they see it implied in the number of television programmes that are set in school. The example of young people attending school is given both nationally and in the wider world via the media. There is also the assumption in any programme involving children that they attend school. The message through these programmes, and other media, to encourage diligence and hard work is also very clear.

8. *Minimal gender differentiation*

Throughout the domains, as skills, beliefs and values were passed on there appeared to be little notice taken of gender. Household skills were taught or passed on to both boys and girls, enabling both to be independent from an early age as it was considered necessary for them to be able to look after themselves if they had to move away from the village to continue their education, which as noted earlier, could happen from the age of twelve, depending on the availability of secondary schools in the area.

Not only were the girls learning to cook. In all three villages the boys and young men were also often observed cooking or the mothers told me that they had taught their sons as well as their daughters to do so. In One Ox village Wona's husband, Marty, frequently helped with the cooking and in Hilltop Village Ibu Anton's two sons were both expected to help with cooking and shopping (see Table 9) and both Indu Helen and Indu Joni in Rainbow Village had taught their sons as well as their daughters to cook (see Table 11). Girls and boys were expected to fetch the water and chop the wood. With animal husbandry, in each case the parents, both mothers and fathers, were unconsciously passing on these skills to their children, both boys and girls as in Table 13. Examples of all of these can be seen in Tables 9, 10, 11, 12, 13.

There was however, some differentiation of tasks as, for example in the case of women not using chain saws and at the rice sowing stage the men make the holes in the ground with long heavy sticks and the women follow behind sowing the seed into the holes (see Tables 14, 15, 16). It was also interesting to note also that far fewer men were seen in the kitchen or washing clothes in the river, after they were married. It did nonetheless vary from family to family with some men seeming to be very happy childminding, cooking and doing the household chores.

Virtually all income generating skills are passed on to both boys and girls without any distinction being made. Again some differentiation of task does take place, such as the men more often being expected to lift the heavy blocks of latex and the women, if they are present, would be expected to provide the food and drink in the forest. However both boys and girls and were free to choose which skills they continued and took on into adult life. This agrees with many of the anthropological research findings from South East Asia, where 'men and women enjoy equally many economic privileges and freedoms' (Errington 1990: 3).

Whilst child bearing is exclusively the domain of the mother, the care and upbringing of the children is undertaken by both parents, although the mother is nearly always the dominant carer. In Tables 23, and 24 the men can be seen to be active in the physical care of the very young children, cradling them in a sling, bottle feeding and comforting them, rocking them to sleep and bathing them in the river. Men in all three villages were observed from time to time engaged in similar activities, in turn providing role models for younger boys, who often appeared proud and very protective of their younger siblings.

Often the men were as equally knowledgeable as the women about the traditional plant remedies and were skilled at using them. In Table 25 it can be seen that each of the informants was intending to pass the information on to their sons and their daughters. In the recreational skills boys and girls were active in the sporting activities although more boys were usually involved. Betel nut chewing seemed to be the main provenance of the women. I only ever observed women chewing betel nut (see Tables 27, 28, 29) but was told that men sometimes do participate.

Traditional beliefs were passed on with little differentiation according to gender. However, in the area of Christian religious beliefs, although children were sent to Sunday School and to Christian Religious Education lessons in school, there was a

clear lack of role models within the church for the boys as very few men were actively involved in the churches in many of the villages.

The traditional values were expected to be learnt, absorbed and imitated by the boys and girls alike.

Informal teaching and learning among the Ngaju Dayak and its relation to educational theory

The findings in the realm of informal learning are in agreement with many of the theories of social cognition and social learning outlined earlier, beginning with Vygotsky's (1978), social development theory. He emphasized the importance of social interaction in the development of cognition and his theory of the Zone of Proximal Development (ZPD), whereby learners perform better and indeed achieve more when collaborating with an adult or more competent member of the group than when they are trying alone. There is evidence that this is occurring among the Ngaju Dayak people, such as when the parent takes the hand of the child to guide them in making the incision into the bark of the rubber tree. Children are assisted by the adults who thereby provide 'scaffolding'. But as the thread continues through Bandura's social theory of learning, renamed 'social cognitive learning', to the situated cognition theories of Brown, Collins and Duguid (1989) the evidence becomes stronger. Brown, Collins and Duguid claimed knowledge is 'connected to the activity and environment in which it is developed' (1989: 32).

Knowledge about skills such as rice cultivation is certainly connected to the activity and borne out of the context of the dry rice forests and swidden agricultural communities where rice cultivation is practised. Knowledge about the spirits and their influence is also learnt and used in a similar way such as when sickness occurs and western medicine fails to provide healing. The context and culture enable the learner to both gain knowledge of the belief and for the belief to grow out of the experience. Likewise knowledge about the values of the society such as respect for parents is learnt within the context of the extended family and in a culture which, for whatever reasons, cares for its elderly members. This activity, observed and experienced by the young person enables him or her to grow up in a context where the elderly need to be cared for and where it is assumed that they will be, and in a culture that respects and to some extent reveres old age.

The evidence becomes even stronger as the thread develops further through the work of Lave and Wenger and their 'new analytical viewpoint on learning' which they termed 'legitimate peripheral participation' (Hay 1996: 90), where they explain that: 'It concerns the process by which newcomers become part of a community of practice' (Lave and Wenger, 1991: 29). Finally to Rogoff (1990) and her situated cognition and socio-cultural

cognition theories and the idea of 'guided participation' (p. 8). These ideas can be seen being worked out in the practical, real-life world of learning and teaching of the Ngaju Dayak people as the children are included in all the activities and are expected to play some part from a young age and a fairly full part from the age of about twelve years. However, they learn together, as a community with important input from peers. There is the expectation that the children and young people will participate and be a part of the working community.

Thus whilst many of these theories of situated learning have been developed and applied largely within a formal or semi-formal learning context, it can be seen that there are many aspects of these theories clearly evidenced in the informal learning and teaching of the Ngaju Dayak people.

Formal/semi-formal methods

Not all Ngaju Dayak teaching and learning, however, is informal. A certain amount of semi-formal and formal education does take place. As the infra-structure of the province of Central Kalimantan improves and more efficient communications are established, increased contact with the wider world becomes a reality, particularly through the medium of television via satellite dishes. Furthermore, with the provision of nine years of formal education a number of skills which were formerly passed on informally are now being taught either semi-formally or formally. However, it must be noted that at this point a number are still being passed on in both or all of these categories.

It is perhaps not surprising to note that in general it is the skills and beliefs which have been more recently acquired which are being passed on formally or semi-formally. These are the skills of numeracy and literacy and skills and beliefs connected with the Christian religion. Numeracy and literacy and Christian Education is taught through the formal school system and Christian religious beliefs and practices, which since the Reformation, have relied heavily on literate methodologies, are also being passed on mainly semi-formally by the church.

In these situations, examination of the data reveals that a different set of themes emerge and can again be seen to apply to all three domains, although certain exceptions are evident in the values domain. In formal/semi-formal teaching and learning situations, no longer is the teaching mainly by the parents passing on skills, beliefs and values by modelling or demonstration, but instead has been replaced by professionals teaching from formal, usually written sources. Learning is no longer primarily through observation,

listening, participation, imitation and experiment but now hearing, repeating and reading are important. The real or natural environment and the family context has been replaced by the school or church as the special place for learning. The minimal gender differentiation remains.

As this shift from informal to formal/semi-formal education occurs it becomes clear that this data no longer fits the grid of the eight themes above. The themes that emerge from the informal teaching and learning are not so applicable to the semi-formal teaching and learning and hardly applicable at all to the formal situation. For example, planting rice has been taught informally by the parents to the children and fits well into the eight themes above. Traditional story telling, however, is no longer only taught informally by the parents or grandparents but has begun to also be taught semi-formally and formally within the school system, with stories being written down and read in classrooms. Thus no longer are the parents the only teachers, nor is the learning primarily through observation, participation and imitation (or listening and repetition as in the case of traditional story-telling). The real and meaningful environment has been substituted for the classroom or church building and the context is no longer the biological family but the school or church family.

Whilst values were mostly transferred informally they were also being passed on by the expectations of the school and to some extent the Church. However, in the case of values most of the eight themes connected with informal teaching and learning still pertained with just two changing when values were transmitted formally, that is the teacher and the place. The teacher became the professional school teacher, the minister or the semi-professional Sunday School teacher who might have received some minimal training and who was usually paid a small honorarium. The place of transmission moved from the home and community to the school or church building (see Table 113). Values therefore can be said to be being passed on 'naturally', deliberately and directly.

'Naturally', meaning that by example and unconscious modelling the values are absorbed from everyday conduct informally. Deliberately, as they are also taught via stories etc. in school, Sunday School, and home both formally and informally and directly as instruction is given by parents/teachers and elders to children formally, semi-formally and informally.

In summary, therefore, what emerges from the data is that in formal/semi-formal learning the eight themes above, applicable to informal methods, have been replaced by a different set of five themes comprising of:

1. Professionals or 'experienced others' as teachers
2. Teaching from written rather than oral sources

3. Learning by hearing, repeating and reading
4. A 'special place' – either school or church building as the context for learning
5. Minimal gender differentiation

1. *Professionals or 'experienced others' as teachers*

In the formal school situation it is no longer the parents or the family who are the main agents of passing on numeracy, literacy and Christian related skills, beliefs and values to the next generation. Instead they are replaced by the 'professional' or 'designated other' who becomes the teacher. In the school situation this is the professional teacher, trained in the city mainly by and in western scientific methods. The majority of teachers in the village schools came from outside of the village where they were working, placed there by the government. They are fluent in the national language, which is the language of education, but may not be familiar with the local language. In the case of the church, the teacher is the ordained clergy, trained outside of the village in a seminary in the city where she or he is also trained in and by western scientific methods of teaching and learning. They almost always serve in a village other than their own and often among a people speaking a different dialect from their mother tongue, although the clergy will be fluent in the national language, which the village people will also be able to speak. There is, however, some local lay training and lay people in the church are sometimes entrusted with the role of teaching, usually after being officially designated as an 'elder' or Sunday School teacher by a higher governing body of the church.

Although traditional story telling in the homes by the parents and grandparents appears to be on the decline, some vestiges remained in all three villages. It was when the electricity had failed in a home in Rainbow village meaning no television and an early night, that Grandma was overheard telling a story to Bella, her grand daughter, as we were all lying on our mattresses before falling asleep (see Table 31). However, as shown in Table 30, these stories are now being written down and read by the pupils in school or told by the professional teacher rather than being primarily passed on by word of mouth from the older generation to the younger. Although many of the younger generation had heard the stories from their grandparents, most of the current generation of parents said they no longer told stories to their children. Thus while some reading, writing and numeracy skills were still being passed on by the parents, specifically the mothers, they were increasingly being taught by the professional school teacher (compare Table 30 with Tables 31 and 34).

With Church Related Skills in One Ox Village (see Table 36) the professional Minister clearly becomes the teacher, and in Rainbow Village (see Table 37) the 'experienced others' are fulfilling that role. In Hilltop Village (see Table 35) both are evident.

In terms of beliefs, where possible a professional clergy person would be in charge of the Christian teaching in the village although he/she would be assisted by the lay leaders of the congregation. The passing on of beliefs, however, was more often than not considered by the parents to be the prerogative of the 'professional' and not the duty or responsibility of the parents themselves (see Table 52). This professional was often younger than the members of the congregation whom he/she was instructing, deviating once more from the cultural norms.

2. Teaching from written rather than oral sources

The government sets out the school curriculum and how it has to be taught in every school throughout Indonesia, although provision is made for some local variation. Books are provided by the government and teachers rely heavily on these written sources to teach. In the church, the Bible, in both the local and national languages is the main text book for teaching the faith. In the past the hymns would have been learned by heart but today the Christian worship songs and hymns have been written down and books rather than memory are relied on.

With the emergence of the professional teacher in the school or the church, the sources of learning have begun to change from oral to written sources with for example, some of the traditional folk stories now appearing in the school text-books in written form as noted above (see Table 30). In Hilltop village the source for the lesson observed and all of the examples were taken from the given textbook (see Table 32).

In Christian education, the Bible, which has been in the local language for over a hundred and fifty years, has always been a written source for Christian teaching and continues to be used with the increasing use of literacy being expected in the participants of training programmes (see Table 37). The Bible was read and the congregation were encouraged to read it for themselves, although few apparently did so. Books containing the liturgies for special ceremonies and services were also used extensively by the leaders (see Table 52). However, there was an oral element to it in that the passage was always explained orally (see Table 52).

3. Learning by hearing, repeating and reading

Stories continued to be listened to (Tables 30, 31), and memorised. Learning takes place in school as the pupil listens and repeats what is read or told to her/him (Table 32). The children repeat what they hear and begin to read for themselves. Memorising and rote learning still play an important part in formal school learning. To a lesser extent they are part of the semi-formal learning of the church where some hymns, songs and some prayers are modelled or demonstrated and then learnt by heart. The Bible is read in church services. It is also hoped that learning takes place as the pupils listen, hear and repeat as well as read for themselves. On one occasion, 5 year old Diana in Hilltop village was overheard telling the beginning of a traditional story to her young friends, clearly imitating what she had heard and seen others doing (Table 30). More often, however, communication and numeracy skills were learnt by hearing, repeating, learning by rote and reading rather than through observation and imitation (Tables 32, 33, 34).

4. A 'special place' as the context for learning

With the emergence of the professional to teach, it follows that a special place is required for the teaching to take place and so the school and the church building has replaced the home as the place for passing on these particular skills. As previously noted, many parents and children regarded the school building as the place to learn how to read, write and count. Whilst some parents would have been happy to help the children learn at home they complained that the children had no desire to learn at home, preferring to watch television after school. Mama Lena in One Ox village, had continued through into further education and obtained a college diploma in business management. She was therefore keen for her children to progress in school but told me:

I used to help them with their homework in the evenings but now they don't want to learn at home. They only want to watch the television. If ours is broken they go off to find somewhere else to watch it.

As the family home or forest hut has become less and less the place for passing on traditional stories, communication and numeracy skills are far more likely to be taught in school and therefore in a special building (see Tables 33, 34).

The home was, however, an important place for the mid-week church meeting which rotated around the homes of Christian church members. But even though the 'place' was a home and therefore to some degree less formal than the church building, the atmosphere during the service when the teaching took place was a semi-formal one as people gathered and took part in a worship service. Food was always served afterwards in a less formal atmosphere.

An important place for passing on Christian religious beliefs was the grave-side. However, when questioned and from other observations, it became clear that the parents considered the main place for Christian beliefs to be taught was either the church building or the Christian religious education programme in the schools. Mothers usually considered this to be the place where beliefs were passed on rather than the home. They saw their responsibility as being to 'send them to Sunday School.'

5. *Minimal gender differentiation*

As in the passing on of skills, beliefs and values informally, there was little gender differentiation in the formal or semi-formal passing on of these. Men and women were both teaching in the schools and becoming head teachers – although in the schools I observed only one woman was the head of a lower or upper secondary school and only one man was the head of a primary school. The largest protestant denomination in Kalimantan, the Gereja Kalimantan Evangelis (GKE) [Evangelical Church of Kalimantan], has ordained women for many years but latterly has ordained more women than men each year. As a consequence there are many women ordained ministers serving in the village churches. Both men and women are eligible to become church elders or Sunday School teachers, although I only heard of one man teaching in Sunday School.

Communication and numeracy skills were passed on equally to the boys and to the girls (see Tables 32, 33, 34) and girls were considered to be equally entitled to further and higher education as exemplified by the number of daughters of all of the participants who had continued their education.

Key Problem

The data has given clear indications of the ways in which skills, beliefs and values are passed on. This leads to what I perceive to be the core problem raised by this research. Based on the evidence drawn from the data across the domains and collected from the three different locations, the Ngaju Dayak women who were observed and interviewed are predominantly oral learners and technically 'functionally illiterate'. The Lausanne Occasional Paper No. 54, defines an oral communicator as:

Someone who prefers to learn or process information by oral rather than written means. (Thus, there are literate people whose preferred communication style is oral rather than literate, even though they can read). Also, someone who cannot read or write. Someone whose preferred or most effective communication and learning format, style or method is in accordance with oral formats, as contrasted to literate formats. (Claydon 2006)

They offer the following explanation from UNESCO of the meaning of functionally illiterate:

A person is functionally illiterate who cannot engage in all those activities in which literacy is required for effective functioning of his group and community and also for enabling him to continue to use reading, writing and calculation for his own and the communities development. A person who has had some education but does not meet a minimum standard of literacy. To read poorly and without adequate understanding. Lacks sufficient skills in literacy to function as a literate person in his or her society. Some say that statistics indicate that 70% of the world's population are either illiterate or functionally illiterate. (Claydon 2006)

The methods employed in Christian education, however, have been predominantly methods based on 'culturally Western' (Tweed and Lehman 2002) scientific ways of knowing and as such have not always been successful in helping the women to grow in their Christian faith. The goal of Christian education as defined by Downs (1994:16) is 'the ministry of bringing the believer to maturity'. The syncretistic nature of many religious practices in the churches in the villages studied would suggest a lack of maturity in the Christian faith. I maintain that a major help in achieving this will be if firstly, the Christian women have a more effective understanding of the Bible. The Bible, being a written source and thus the domain of literate methodologies, provides a challenge, but I suggest not an insurmountable one, in terms of appropriate methodologies to achieve the desired goal.

Secondly I suggest that achieving the goal of seeing the women become mature in their Christian faith is more complex than just the question of literate versus oral methodologies, although this is possibly the key problem. The reasons for passing on these skills, beliefs and values is also of importance as argued in the previous chapter. Therefore both the 'why' and the 'how' will be considered in the final chapter as I look at the implications of this research for Christian education among the Ngaju Dayak people.

Chapter 10

CONCLUSIONS

This final chapter reflects on the process of the research and the outcomes of the study summarising the major findings and showing their contribution towards encouraging more effective Christian Education among the Ngaju Dayak people. The limitations of the study will be considered and suggestions made for further research.

Reflection on The Research Process and Learning about Myself

Using an ethnographic approach meant that I was able to observe Ngaju Dayak people in a comparatively naturalistic setting. Ethnographic interviewing enabled me to discuss freely and in depth with the people and to discover more about their lives as women and learn something of their hopes and aspirations 'from the inside.' Living with people whom I had previously met and known slightly, over a period of two years, enabled 'rich' data to be gathered.

Nevertheless I was always an 'outsider'. Wherever I went I was noticed, even though as time went on the strangeness wore off and I was greeted as a friend. I had the power to choose my own destiny - get up and walk away if the work became too arduous or I got sick. I was aware that I had the freedom and the means to 'dabble' in rice planting, to 'play' at rubber tapping. I was learning, I was experiencing their lives but always I could come and go, not dependent on the land, nor restricted by centuries of culture and tradition. I had the means to buy a traditional basket, handmade by Mama Yanti - to put in the corner of my bedroom in my city home - and thought of Ibu Laura who had had to work for two days in the basket maker's field to pay her for the basket which she had bought as a necessity to plant and harvest her rice and keep her family. And yet whilst I was envied for my wealth and background, I was pitied because I was single, and was told I had no future. In spite of a reasonably prolonged period in the field I would never become an 'insider'. Clearly the lens through which I viewed my Ngaju Dayak women friends was affected by my own background and all that I brought to the study. And yet it was precisely because of my own 'socio-historical location' and the 'values and interests' that they conferred on me (Hammersley and Atkinson 2007) that I undertook the research and brought to it insights that only my own particular background could bring.

Reflecting on the 'teacher I' of the opening chapter, I realised again that it was not possible to totally lay aside the teacher role as that was how I was viewed by the Ngaju Dayak women and yet as a researcher I was not there to teach but to learn. This resulted in a degree of personal confusion as to just what my role was. For large amounts of time I

seemed not to have anything to do, or perhaps more accurately to have no assigned place in the community. I was aware that I didn't really fit, no matter how welcome I was made to feel. From this I began to realise afresh the wisdom of not trying to adopt the role of the insider, which I clearly wasn't, but instead, in future work to build on what I had learnt from my research and to use my role as an invited outsider to share my insights with the future teachers of these people, rather than trying to become one of them.

Any fragment of over confidence I may have unconsciously felt prior to the study quickly evaporated as I learned to respect the great strength and tenacity that the Ngaju Dayak people showed in the face of often very trying and difficult circumstances. I had much to learn from them but also the whole experience served to help me value my own, very different strengths and weaknesses and to begin to see more clearly what I might have to offer to them. Some of these ideas are developed further in the possible implementations of this research discussed later in the chapter.

My position as an 'outsider' meant that in each village I relied on an 'insider' – someone originating from the village or living in it, to select the participants on the basis of the criteria I gave to them. I was dependent on their judgement for suitable people. Although the number of women who fulfilled the criteria in any one village and who were able and willing to take part was quite limited the ones selected proved to be a suitable mixture of younger and older women, mothers and grandmothers native to, or domiciled for many years, in the village. They were all mother tongue Ngaju Dayak speakers but were able to communicate in the national language also.

A further advantage of spending an extended period of time in the villages meant that a large amount of data was generated. Given that the location and circumstances of the study meant that the data had to be processed manually, the large amount of data was not always easy to deal with. However, whilst limiting the domains in some way would have made the project more manageable, the results would have been less useful for helping the GKE Church to develop Christian Education programmes in accordance with traditional methods of teaching and learning.

Reflection on The Findings

The willingness of the participants to allow me to partake in their daily lives enabled me to gain many valuable insights and generate new knowledge about Ngaju Dayak life and their traditional ways of teaching and learning. This can be summarised as follows:

- The older Ngaju Dayak women are predominately oral learners and not literate learners. They have learned to read and write but rarely use those skills and for many of them reading and writing are not their normal or preferred means of learning.
- Mothers played the dominant role in passing on traditional skills, beliefs and values to their children.
- The main methods of passing on skills, beliefs and values were through modelling, that is unconsciously demonstrating a task, or action connected with a belief or value, or, less often, consciously demonstrating something to the child.
- Children were included in virtually all activities within the village enabling them to observe, listen, participate, imitate and experiment – the main ways in which the children learned.
- The context for teaching and learning was the family and the ‘real life’ situations.
- Traditional teaching and learning was almost entirely informal.
- Traditional teaching and learning styles were mainly kinesthetic, auditory and visual.

These findings confirm that Ngaju Dayak traditional learning fits best into a situated learning model. Although such a model of learning is a constructivist one and therefore in principle raises problems for Christians committed to a belief in revelation and objective reality, as Archer (1998:8) points out,

Evidence exists to support the fact that differing experiences do provide for different constructions of reality. There are multiple ways of experiencing the same facts. While the assumptions of Constructivism seem contrary to a Christian worldview, the data seem to support the assumptions.

He concludes, ‘Thus the practice of constructivist teaching is not exclusively dependent on post-modern assumptions, but can be supported by Christian assumptions as well’ (p.9). I concur with this and claim that although the learning model that best describes Ngaju Dayak traditional learning is a constructivist model, valuable lessons can be learned from the practises of constructivist teaching which are not in conflict with a Christian world view.

‘The key components of the situated learning model’ according to McLellan (1996: 7), are: stories, reflection, cognitive apprenticeships, collaboration, coaching, multiple practice, articulation of learning skills and technology. While not all of McLellan’s components are evident, a number are very important in Ngaju Dayak learning.

Firstly McLellan (1996:7) cites stories. 'Stories are very important for situated learning and for the social construction of knowledge'. Stories too have always been an important part of Ngaju Dayak life. Although television has largely replaced the practice of traditional story telling among the family, stories remain an important way in which information is passed on, especially in the absence of many literate sources. The number of times the method 'orally transmits' occurs in the beliefs domain tables, bears witness to the importance of stories as a means of continuing to pass on these beliefs.

The concept of cognitive apprenticeship and knowledge as a tool, in the situated learning model, describes accurately the way in which Ngaju Dayak parents pass skills to their children and the way in which the children construct their knowledge of rice planting for example, from their enculturation into the rice-planting community.

Thus knowledge is practical in the Aristotelian sense. The rice planting example clearly demonstrates the necessity of collaboration, a further aspect of situated learning. Collaboration is essential for the young person to be able to really acquire a useable skill. The methods used in planting demand that men and women, young and old, neighbours and family all work together on the project.

'Multiple practice is a central feature of situated cognition' notes McLellan (1996:11). This is the constant repetition of the activity or principle being learnt. This does not only apply to the skills domain. In the values domain, the daily repetition of both exhortation to obey parents and the opportunities to carry it out, ensure that this value is passed on.

Aspects of the situated learning model which are not evident in the traditional Ngaju Dayak learning model are reflection, which is not actively encouraged but may well take place; articulation of learning skills, which again does not appear to be practised and 'technology' by which McLellan (1996: 12) appears to mean video players, camcorders and similar articles which clearly are not part of a traditional Ngaju Dayak learning model.

Nevertheless, in spite of these omissions, a comparison between the two models of learning outlined above – the traditional Ngaju Dayak model and the situated learning model as outlined by McLellan (1996), exhibits sufficient common ground to claim that the situated learning model is close to the Ngaju Dayak learning model.

The question of the use of a constructivist model within a Christian worldview framework had been addressed above. However, the question of the place of cultural transmission

theory within a constructivist model also needs to be considered briefly. If culture is constructed then each new generation of Ngaju Dayak people must construct their own culture based on the models of the previous generations, with inevitable adaptations and changes. If, however, it is transmitted it can be argued that it will be transmitted unchanged, from generation to generation. Dekker (2001) maintained that a theory of cultural transmission was sufficiently robust to take into account both transmission and transformation. Ligenfelter (1992) distinguished between the 'cultural system' which he describes as the fundamental beliefs and symbols of a society and which are to a great extent 'given' or transmitted from generation to generation, and the 'sociocultural system'. This, by implication, could be constructed in each generation as it, 'grows from distinctive social environments, producing values and behaviors that may be contradictory to beliefs held in one's "worldview"' (1992:205). Such a theory of cultural transmission can be meaningfully held alongside a constructivist model. This study showed that the culture was indeed changing. It was probably most clearly seen in the concrete example of the non-transference of skills deemed to be irrelevant by the current generation but it is also evident in the way values are changing as the social environment changes and outside influences mould the thinking of the younger Ngaju Dayak people. No longer is the word of the parent final in the minds of the children.

Finally, the findings confirmed much that has been written and studied among other indigenous peoples throughout the world. Whether the Ngaju Dayak people are classified as indigenous or given an alternative name by the Indonesian government, they nevertheless, could be seen to have much in common with many other non-western oral learners. I now turn to how these findings might be implemented in a programme of Christian Education for the Ngaju Dayak rural women

Possible Implementations

It is hoped that in the light of the questions that have been asked regarding how the Ngaju Dayak Christian people pass on their traditional skills, beliefs and values, and the answers that are beginning to emerge, that future Christian education undertaken in partnership with the Kalimantan Church will not be predicated on simplistic answers based on Western thought patterns. Instead it is hoped that, working together with the local church, answers will be sought which result from having a clearer understanding of the Ngaju Dayak people, how they structure their society, the challenges and difficulties which they have to overcome in their daily lives, and how they traditionally teach and learn. That understanding needs to be translated into methodologies which are appropriate and contextualized, that are in accordance with the Ngaju Dayak way of learning outlined

above, and better able to meet the needs of the Ngaju Dayak people and achieve the goal of helping them to understand the Bible more effectively and so become more mature in their Christian faith.

Firstly, Christian education must be seen to be relevant to the Ngaju Dayak Christians. Clear teaching of the Christian worldview needs to be carefully and repeatedly given, and compared and contrasted sensitively with the traditional Ngaju Dayak world view. Ngaju Dyak people also need to survive and have their basic needs met. They want to progress materially, as new possibilities are opened up to them on their television screens and become more accessible as a result of an improved infra structure. As such any Christian education programme needs to recognise these factors and address these in context. Further, the social structure of the society needs to be carefully and sensitively considered, taking note of the pressure of the group and the strong family and societal values which the Ngaju Dayak people possess.

Secondly, the question of literate versus oral methodologies of teaching is of paramount importance. There seem to be two possible ways forward. One is to suggest that the Ngaju Dayak people need to change in order to be able to benefit from literate methodologies and the other is to argue that the methodologies should change in order to enable the people to benefit from them. I would suggest both approaches are needed and in the following section I outline how this might be achieved.

Changing the methodology

There are a number of good reasons for changing the methodology. Firstly, it has been demonstrated that Ngaju Dayak people are oral learners at heart and therefore Christian educators can look to the strengths of this method of learning and employ it effectively for the teaching and learning of the Christian faith. Oral learners, supported by the evidence of this study, are able to memorise well, learn by rote and re-tell stories and pass on information accurately. These are abilities which can be maximised in the learning and teaching of Bible stories and Christian doctrines.

Secondly, the current situation in the villages dictates that oral methods of teaching and learning are much more frequently practised by adult women. The almost total lack of books in the villages means that even when they want to read they have little or no opportunity to do so apart from reading the Bible and the hymn book. The relatively low level of understanding of written texts by many means that the Bible is a difficult book for them to read meaningfully. Further, the lack of a regular supply of electricity means that

computers are virtually absent from the villages and so access to written material on the screen is also not possible. Until the situation changes it would seem pertinent to use the strengths of oral methods to teach the women.

Thirdly, whilst it is acknowledged that there is much to be gained from helping the older Ngaju Dayak women to become more literate, this will inevitably take time. For the older women in the villages, this may not be an option. If the adult women are to be helped to grow and mature in their faith, help needs to be given now, rather than at some indefinable moment in the future when they are sufficiently literate.

Fourthly, there is no inherent problem in teaching the Bible orally, in that much of it was originally given orally to predominantly oral learners.

The research indicated that much of the Christian education took place semi-formally in the church or formally in the school. However, most traditional learning took place informally in and around the home or forest, with the family very much involved in the teaching. Effective Christian education can make use of informal, semi-formal and formal methods, but it is my belief that in either case, oral methodologies will be more effective in the short term. Oral methodologies are well suited to informal teaching and learning and can also be utilised in semi-formal teaching and learning situations. Even in the formal learning situation of the school, oral methods can be used to enhance the learning experience. It would seem pertinent therefore to consider how informal, semi-formal and formal oral methods can be used in teaching and learning Christian education.

Suggested oral teaching and learning methods

Story telling is a key method of teaching. Bible stories, selected to teach certain themes or doctrines can be taught orally, memorised, re-told and memorised by the hearer who in turn will continue the cycle. This same method could be extended to moral or ethical stories, either composed by the teller or adapted from local or other folk stories. The same cycle of telling, listening, memorising and passing on is encouraged. This is very much the traditional way of passing on beliefs and values in the Ngaju villages. With the availability of modern technology the same principle could be applied but using recorded stories on CDs, in conjunction with large pictures as produced by Gospel Recordings, (Global Recordings Network, n.d.) or through use of DVDs. Clearly these methods have their limitations exacerbated by erratic electricity supplies, the relatively high cost of batteries and the lack of availability of materials in the local language, although a number

do exist in the national language. However, each of these problems can be addressed and are not insurmountable.

Enacted ceremonies and other visual displays, played an important part in the passing on of traditional skills, beliefs and values and this can be used in Christian education. Simple drama and role-play can be used to convey stories and teachings, hand made puppets can be used for the same purpose. This can also involve a group of people in the preparation, in a similar way to much traditional teaching and learning.

Using the strengths of oral learners, Ngaju Dayak people can be encouraged to memorise scripture and repeat it orally. This is not an end in itself but having memorised scripture it can be discussed using appropriate questions and answers. It must be remembered that questioning is not a prime method of learning for the Ngaju Dayak, but limited and appropriate use could be beneficial. It is in areas such as these that the opinions and suggestions of local people will be of paramount importance as the findings are implemented.

Changing ways of learning

It is not suggested that only oral methodologies should be used but that using oral methods alongside the development of literate ones should enhance the learning experience. The reasons for encouraging literacy alongside oral methods are fairly compelling and are discussed in the following paragraphs.

Firstly, although the Ngaju Dayak people are functionally illiterate, all the women involved in this study had been taught to read and write and most were still able to use these skills to some degree. The majority had access to televisions, satellite dishes and DVD players. Often foreign language programmes had written sub-titles which needed to be read. More significantly, the messages beamed into their homes were underpinned by a totally different value and education system, much of which looks very attractive and progressive to the rural Ngaju Dayak people. One extreme example of this 'culture clash' was witnessed as I sat on the floor of a wooden house built on low stilts, way up river in Hilltop village. There was a limited supply of electricity, the house had very little furniture – we slept on mattresses on the floor and ate sitting on the floor around a mat in the kitchen area. The television was on and due to presence of a satellite dish we sat watching the programme, 'American Idol' being beamed in from the United States. This is a world which the Ngaju Dayak people want to be a part of, but to fully take part in it, and to be

discerning and discriminating of what will benefit them and what will destroy their culture, they will need to be more functionally literate.

This is closely related to the second reason for encouraging literacy. As the twenty first century progresses the march of 'progress' will inevitably and inexorably impact on the lives of these rural Ngaju Dayak people. As the infrastructure improves and electricity is freely available, more computers and internet access will become available. To remain functionally illiterate will deny them access to the world wide web and a vast store of information that could be available to them, or expose them indiscriminately to values and ideas that they are unable to evaluate meaningfully.

Thirdly, their children are already being educated in literate methods and are preparing to take their places in the global economy. The gap between the education of the parents and that of their children will widen and family life, which has been such a strong pillar of Ngaju Dayak society could be strained further. It is already evident that children who are educated beyond year 9 of secondary school more often progress to further and higher education, taking them out of the villages, exposing them to a different life-style, whereupon they are reluctant to leave to return to the village.

Finally, there is the more specific need to encourage literacy alongside oral teaching in order to help the Ngaju Dayak people mature in their Christian faith by being able to read the Bible for themselves and have a clearer understanding of its teaching. Many advocates of giving an oral Bible to illiterate or functionally illiterate people, acknowledge that there is still a need eventually for there to be a written version, available in the local language and able to be read by the people (storyrunners 2009). It can be argued that to not do so exposes oral learners to the possibility of error and misunderstanding. Many of the European Protestant Reformers in the sixteenth century attributed what they saw as heresies, to the lack of a written text being available and accessible to everyone in the Western world. The argument for improving literacy among the Ngaju Dayak Christians is even more compelling when it is remembered that they have had the Bible in their own local language for more than 150 years and a modern translation is now available. It has also been available in the national language for a similar length of time and most of the Ngaju Dayak people involved in this study were bi-lingual speaking both the local and national languages. The challenge is not therefore to provide the Bible in a written form in their language but to encourage them to see its relevance to their lives in Ngaju Dayak villages in the twenty first century; to be motivated to want to read it and to be sufficiently functionally literate to be able to benefit from it.

Some suggested ways to improve literacy

If literacy is to improve, they need access to simple, interesting books. Whether these should be in the local or the national language needs further research from those with linguistic expertise. However, in the short term they will be in the national language as virtually no books are available in the local language. Availability of books in the national language and access to them needs to be considered, possibly by setting up simple local libraries organised and overseen by the local women. Simple book stalls could also be introduced and stock made available. Transportation would be a problem but again with increasing road access to many villages this may gradually be overcome.

It would be valuable to see people writing stories in their local language and this might be accomplished by employing a mixture of oral and written methods. This might also increase motivation to read and write and it could be extended to Bible stories or stories communicating Bible truths.

Ways should be sought to encourage mothers to read stories in the national language to their children and to encourage families to watch DVDs together and discuss them. Ways of increasing motivation are also clearly important. One possibility might be by offering “rewards” for learning to read and write better, perhaps in the form of a series of graduated certificates. The context is also important. Traditionally virtually all activities take place in a group, therefore Christian education needs to take place in a group, either the family or extended family group, the church women’s group or the church congregation.

The question of oral versus literate methodologies has been considered at some length. It is important however to remember that differences in approaches to learning are in fact even broader than this. As noted earlier, Tweed and Lehman (2002) drew attention to the totally divergent philosophies of learning that underlie what they described as ‘culturally Chinese’ and ‘culturally Western’ learners. These relate largely to differing values and attitudes to education and learning. If learning is to be maximised among the Ngaju Dayak people it is essential to consider and be constantly aware of which values and attitudes are held by the Ngaju Dayak people and what might be the implications of these very different approaches.

In my research it was found that the person and place concerned with passing on traditional skills, beliefs and values were both important. In terms of teaching and learning the Christian faith it is essential that both be given due consideration. There is clearly a

place for the professional coming in to the village from outside and bringing her/his expertise. Research evidence however, suggests that rather than only perpetuating this pattern, the outsider or expert should be encouraged to transfer her/his learning to the local people who are encouraged to teach it to their families and extended families, informally. Whatever is taught in church or Sunday School needs to be followed up and emphasised in the home both implicitly and explicitly. The expert or professional should be available to guide and advise. Strategic local lay people should be sought who will encourage this pattern. Similarly with Christian Religious Education in school. The professional teacher could work more closely with the parents and parents could follow up what was being taught in the school. The location will depend on the nature of the teaching being given but again the research would suggest that while semi-formal learning and teaching might be suited to the special place – the church building, most informal learning will be better suited to a home setting.

Finally, much Christian teaching is transferred implicitly, as values and attitudes are modelled in the home and around the village. This places great responsibility on the parents, Christian leaders and professionals to model Christian skills, beliefs and particularly values and attitudes in the course of everyday living and to teach by example.

Suggested further research

Any further research among the Ngaju Dayak people which can provide information about the comparative effectiveness of teaching and learning in the local language versus the national language would be of great benefit in forwarding the outcomes of this research as outlined at the beginning of the chapter.

Another profitable avenue of research would be action research which implements and tests some of the suggestions put forward in this final chapter. For example work involving parents in setting up reading groups and testing their effectiveness would be very helpful.

It is recognized that this particular research concentrated on a small group of women from one particular ethnic group in three locations. Further studies focussing on this same ethnic group living in other locations or focussing on other ethnic groups in Central Kalimantan would be useful as it would afford opportunity to compare the findings with this study and would provide further valuable information.

The early missionaries to the Ngaju Dayak people laid a firm foundation of Christian teaching. The GKE church which developed out of that early missionary movement has grown considerably over the past one hundred and seventy three years. However, great developments in technology and the existence of a global economy, challenge the church at the end of the first decade of the twenty first century to continue to carry out its mandate to bring rural Christians to maturity in the faith by teaching and explaining the Bible in culturally relevant ways. It is hoped that this research will contribute towards that end.

Appendix 1

Informal Semi-Structured Interview Questions

Skills

1. Starting from when you wake up in the morning, can you tell me all the jobs that you would do everyday.
2. Which of these things can your children do?
Who taught them? How did they learn?
Or
Why can they not yet do these?
3. Can you tell me all the different ways people here in the village can earn money?
5. From all the ways of earning a living that we have mentioned, which of them can you do? Who taught you? How did you learn?
6. Which of them can your children do? Who taught them and how?
or
7. Of those the children can't yet do can you explain why?
8. If you were going to plant rice this year, can you tell me all the steps involved from the beginning until it becomes rice ready to eat?
9. Where do you learn all this? From whom and how?
10. In your opinion, why doesn't every family plant rice?
11. In the processes of growing rice, which tasks are carried out by women and which by men?
12. Can you tell me all the things women in the village would read.
13. What about writing? What has to be written?
14. What about calculating/counting? What do you need to count or calculate? How did you learn?
15. Supposing you wanted to learn how to make an English cake from me, what would be the easiest way for you to learn? Would you write down the recipe?
How would you remember the ingredients and the method?
16. From where do you get your information about what is happening in Kalimantan, Indonesia or the wider world?

17. Would you say you knew most of the Bible stories?

(If the answer is 'yes' continue with a)

a) Where did you learn the stories? How?

(If the answer is 'no' continue with b)

b) If you wanted to learn the Bible stories what would be the easiest way to understand them? E.g. listening to them, reading them yourself, watching a film or drama? Or any other ways?

18. (For Church Elders) How did you learn to be an elder and to lead services etc.

19. How did/do your children learn about Christianity?

Informal Semi-Structured Interview Questions

Beliefs

Topic: Pregnancy and Birth

1. Can you give me examples of anything that can't be eaten by a pregnant women?
2. Are there things the husband mustn't eat?
3. Are there foods that are considered good to eat?
4. Are there things that mustn't be done by a pregnant women?
5. Are there special things you must do to ensure the health and welfare of the baby (foetus)?
6. Are there any special ceremonies that pregnant women have to carry out at certain times during the pregnancy?
7. Did you carry out all of the ceremonies and follow all the taboos and instructions above, when you were pregnant?
8. When a mother gives birth who is allowed to watch and help?
9. Are there people who are not allowed to be present at a birth?
10. Are there any special ceremonies that have to be carried out after the birth?
11. Do you believe there are people who can cause the birth to be difficult or harm the mother and/or baby such as vampires etc?
12. Is there a special ceremony to choose the child's name?
13. Did your children follow all these traditions?
14. Do you think your grandchildren will follow the traditions?

Topic: Death, burial & the after-life

1. Can you explain to me about watching the body of the deceased?
2. What happens as you take the coffin with the body out of the house?
3. What is buried with the coffin and for what purpose?
4. Do you think people who have died can communicate with the living through dreams?
5. What do you understand if it rains or thunders after someone has died?
6. According to you where does the spirit go when someone dies?
7. Why do you have a 40 day ceremony? What is its purpose?
8. Have you renovated the graves of your parents or forebears?
9. What do you say to small children to explain that someone has died?

Topic: The Land - Farming and Agriculture

1. Are there any special ceremonies that you carry out that are connected with:
 - a. Cutting down the virgin forest?
 - b. Burning the land?
 - c. Planting rice?
 - d. Harvesting rice?
 - e. Planting vegetables?
 - f. Planting rubber?
 - g. Tapping rubber?
 - h. Fishing?
 - i. Any other similar ceremonies?
2. How did you learn about these ceremonies?
3. Do you, as a Christian, still carry out these traditional rituals? Why/why not?
4. Do you think your children and grandchildren will carry out these traditions?

Topic: Spirits, Omens and Other Supernatural Signs

1. How does the village make sure it is safe and no harm comes to it?
2. Are there animals that give special signs or other omens?
3. What do you think about other spirits, good and bad, ghosts, familiars etc. Can you tell me about them?
4. How did you learn these things?
5. Do your children believe in these things? How did they learn about them?
6. Do you think your grandchildren will continue in these beliefs?

Informal Structured Interview Questions

Values

1. What is your definition of a 'good' child?
2. What is your definition of a 'bad' or naughty child?
3. Please would you arrange the 7 cards in order of importance, in your opinion:
Discipline, honesty, politeness, obedience, responsibility, independence, harmony.
4. Which of the 5 actions on these cards would get the greatest punishment? What would that be? Why is it so bad?
5. a. What is the most important thing you want to pass on to your children?
b. Why is that so important?
c. How are you passing this on?
6. Please would you arrange the following photos into 3 piles:
1. Very important 2. Quite important 3. Not so important

List of photos used for values interview questions

1. Washing dishes (women)
2. Climbing tree, getting fruit (girl)
3. Taxi
4. Sewing and breastfeeding (women)
5. Rubber sap (man)
6. Rubber tapping – preparing knife (women)
7. Rubber tapping –collecting sap (women)
8. Rubber tapping (women)
9. Cutting wood from trees in forest (women)
10. Carrying latex (women)
11. Canoeing (women)
12. Raffia/carving work (men)
13. Carved handles
14. Fishing
15. Serving meat-balls (women)
16. Serving ice (women)
17. Making chillie sauce (women)
18. Weaving tray (women)
19. Weaving basket (women)
20. Cutting up cassava (man)
21. Hanging out the washing (women)
22. Making bread (women)
23. Lighting the wood fire (man)
24. Cooking the 'singkah' (veg. from edible palm for special occasions) (men)
25. Chopping wood for fire (women)
26. Collecting coconut cups for the rubber sap (man & women)
27. Chopping meat for cooking (man)
28. Getting the water (water)
29. Washing the clothes women)

30. Sweeping the floor (women)
31. Preparing the chicken (women)
32. Getting vegetables from the fields (women)
33. Cleaning/preparing fish for cooking (women)
34. Preparing chicken for cooking (women)
35. Reading in Church (women)
36. Attending church (women)
37. Reading in Church (Men)
38. Doing HW with calculator (children – boys)
39. Reading (girl – child)
40. Reading (adult man)
41. Making toys - car (boy)
42. Making toys – spinning top (boy)
43. Carving and raffia work (man)
44. Reading (children - girls)
45. Reading (women)
46. Attending church (men)

Informal semi-structured interview questions

Values

Topic: Importance of Marriage and Family Life

1. What is your opinion of a Dayak Ngaju women of marrying age, who is not married?
2. Why is it not good to be on your own?
3. Supposing you had a daughter of marrying age who showed no signs of marrying, what would you do?
4. Why is it good to marry?
5. What is opinion/feeling towards people who don't have children?
6. Supposing that you, didn't have children. What would you do?
7. Are there any other reason for having children besides children being important to help in old age and to ensure descendents.?
8. When the parent's are old do the parents go to live in the home of their child or does the child come to live with the parents?

Appendix 2: Skills Taxonomies

1. Combined Taxonomy of Ngaju Dayak Christian Women's Skills in all Three Villages

A. Housekeeping

1) Cooking

- i) lighting a wood fire
- ii) lighting a kerosene stove
- iii) boiling water
- iv) making tea/coffee
- v) cooking meals
 - a) cooking rice
 - b) preparing spices
 - c) catching, killing, preparing and cooking a chicken
 - d) preparing and cooking fish
 - e) cooking vegetables
 - f) cooking pork
- vi) making traditional remedies
- vii) making cakes and biscuits
- viii) washing dishes
- ix) catering for large numbers

2) Washing and Cleaning

- i) sweeping the house
- ii) sweeping the yard
- iii) washing the floor
- iv) washing the clothes
- v) airing the mattress
- vi) weeding the yard
- vii) collecting water

3) Domestic animal husbandry

- i) keeping chicken
- ii) keeping pigs
- iii) keeping dogs
- iv) keeping cows

4) Sewing and mending

B. Subsistence Skills (Providing Food)

1) Cultivating Fields

- i) cut down the forest
- ii) clear the land
- iii) burn the land
- iv) plant rice and vegetables
- v) weed the fields
- vi) harvest the rice
- vii) preparing the rice for cooking
- viii) harvest the vegetables

2) Fishing

- i) 'Rengge' – with a net
- ii) 'Mamisi' – with a rod

C. Generating Income

1) Rubber tapping

- i) getting to the plantation
 - a) trek through forest
 - b) ride a motorbike
 - c) canoe
- ii) cut the bark (tap the rubber)
- iii) collect the sap (latex)
- iv) leave to set in container
- v) transport to river
- vi) calculate the price
- vii) sell on to buyer

2) Retailing

- i) Selling groceries etc. from home-shop
- ii) Selling meat-balls from home-shop
 - a) make the meat balls
 - b) boil different noodles
 - c) make the liquid
 - d) make the hot chilli sauce

- iii) Selling iced-drinks from home-shop
 - a) buy the ice
 - b) buy small red edible balls
 - c) make the agar
 - d) boil sago 'pearls'
 - e) make syrup with red colouring
 - f) mix together in a glass
- iv) Selling home-made cakes
- v) Repackaging and selling goods (e.g. peanuts)
- vi) Sealing plastic bags with candle flame

3) *Making Traditional Crafts*

- i) traditional baskets
- ii) rice sieves
- iii) mats

4) *Panning for gold*

5) *Making gold artefacts*

6) *Felling timber*

7) *Collecting roots*

8) *Fish farming*

9) *Tailoring/sewing*

10) *Working for local government*

- i) Office work
- ii) Teaching

D Child rearing Skills

- 1) *breast feeding*
- 2) *bathing babies and toddlers*
- 3) *nursing babies and toddlers*
- 4) *feeding toddlers*
- 5) *disciplining children*
- 6) *looking after siblings*

E Recreational Skills

- 1) *volleyball*
- 2) *chewing betel nut*
- 3) *badminton*

F Medical Skills

- 1) *Traditional midwifery skills*
- 2) *Modern medical skills (village Health Worker)*

G Church Related Organisational Skills

- 1) *Singing*
- 2) *Leading in prayer*
- 3) *Arranging Church meetings*
 - i) Sunday services
 - ii) Children's meetings
 - iii) Women's meetings
 - iv) Leading Christian worship
 - v) Mid-week Church meetings
- 4) *Financial management*

H Communication and Numeracy Skills

- 1) *reading*
- 2) *writing*
- 3) *calculating/doing arithmetic*
- 4) *story telling*

I Technical Skills

- 1) *riding a motor-bike*
- 2) *using a chain saw*
- 3) *using a calculator*
- 4) *using a mobile phone – phoning, texting, taking photos*
- 5) *driving a car (minibus/4-wheel drive)*

6) *driving a boat*

7) *using a TV, DVD player, radio, tape recorder.*

2. Taxonomy of Ngaju Dayak Christian Women's Skills in One Ox Village

A. Housekeeping

1) Cooking

- i) lighting a wood fire
- ii) lighting a kerosene stove
- iii) boiling water
- iv) making tea/coffee
- v) cooking meals
 - a) cooking rice
 - b) preparing spices
 - c) cooking a chicken
 - 1. catch it
 - 2. kill it
 - 3. pluck it
 - 4. gut it
 - 5. clean the intestines
 - 6. chop it
 - 7. fry or boil it
 - d) cooking fish
 - 1. de-scaling it
 - 2. gutting it
 - 3. chopping it
 - 4. frying or boiling it
 - e) cooking vegetables
 - f) cooking pork
- vi) making traditional remedies

- vii) making cakes and biscuits
- viii) washing dishes

2) Washing and Cleaning

- i) sweeping the house
- ii) sweeping the yard
- iii) washing the floor
- iv) washing the clothes
- v) airing the mattress
- vi) weeding the yard
- vii) collecting water

3) Domestic animal husbandry

- i) keeping chicken
- ii) keeping pigs
- iii) keeping dogs

4) Sewing and mending

B. Subsistence Skills (Providing Food)

1) Cultivating Fields

- i) cut down the forest
- ii) clear the land
- iii) burn the land
- iv) plant rice and vegetables
- v) harvest the rice
- vi) preparing the rice for cooking
- vii) harvest the vegetables

2) Fishing

- i) 'Rengge' – with a net
- ii) 'Mamisi' – with a rod

C. Generating Income

1) Rubber tapping

- i) getting to the plantation
 - a) trek through forest
 - b) ride a motorbike
 - c) canoe

- ii) cut the bark (tap the rubber)
- iii) collect the sap (latex)
- iv) leave to set in container
- v) transport to river
- vi) calculate the price
- vii) sell on to buyer

2) *Retailing*

- i) Selling groceries etc. from home-shop
- ii) Selling meat-balls from home-shop
 - a) make the meat balls
 - b) boil different noodles
 - c) make the liquid
 - d) make the hot chilli sauce
- iii) Selling iced-drinks from home-shop
 - a) buy the ice
 - b) buy small red edible balls
 - c) make the agar
 - d) boil sago 'pearls'
 - e) make syrup with red colouring
 - f) mix together in a glass
- iv) selling home-made cakes

3) *Making Traditional Crafts*

- i) traditional baskets
- ii) rice sieves
- iii) mats

D Child rearing Skills

- 1) *breast feeding*
- 2) *bathing babies and toddlers*
- 3) *nursing babies and toddlers*
- 4) *feeding toddlers*

- 5) *disciplining children*

E Recreational Skills

- 1) *volleyball*
- 2) *chewing betel nut*

F Medical Skills

- 1) *Modern medical skills (village Health Worker)*

G Church Related Organisational Skills

- 1) *Church meetings*
 - i) *Sunday services*
 - ii) *Children's meetings*
 - iii) *Women's meetings*
- 2) *Financial management*

H Communication and Numeracy Skills

- 1) *reading*
- 2) *writing*
- 3) *calculating*

I Technical Skills

- 1) *riding a motor-bike*
- 2) *using a chain saw*
- 3) *using a calculator*
- 4) *using a mobile phone*
- 5) *driving a car (minibus/4-wheel drive)*
- 6) *driving a boat*

3. Taxonomy of Dayak Ngaju Christian Women's Skills in Hilltop Village

A. Housekeeping

1) *Cooking*

- i) lighting a wood fire
- ii) lighting a kerosene stove
- iii) boiling water
- iv) making tea/coffee
- v) cooking meals
 - a) cooking rice
 - b) preparing spices
 - c) cooking a chicken
 - d) cooking fish
 - 1. de-scaling it
 - 2. gutting it
 - 3. chopping it
 - 4. frying or boiling it
 - e) cooking vegetables
 - f) cooking pork
- vi) washing dishes
- vii) Catering for large numbers
- viii) Shopping for food
- ix) Packaging (Sealing plastic bags with a candle)

2) *Washing and Cleaning*

- i) sweeping the house
- ii) sweeping the yard
- iii) washing the floor
- iv) washing the clothes
- v) weeding the yard

3) *Domestic animal husbandry*

- i) keeping chicken
- ii) keeping pigs
- iii) keeping dogs

B. Subsistence Skills (Providing Food)

1) *Cultivating Fields*

- i) Help clear the forest
- ii) burn the land
- iii) plant rice and vegetables
- iv) harvest the rice
- v) preparing the rice for cooking
- vi) weed the fields
- vii) harvest the vegetables

2) *Fishing*

- i) 'Mamisi' – with a line

C. Generating Income

1) *Rubber tapping*

2) *Retailing*

- a. Making and selling home-made cakes

3) *Panning for gold*

4) *Making gold artefacts*

5) *Making Traditional crafts*

6) *Tailoring/sewing*

7) *Working for local government*

- i) Office work
- ii) Teaching

D. Child rearing Skills

- 1) *Disciplining children*
- 2) *Looking after siblings*

E. Recreational Skills

- 1) *volleyball*
- 2) *Chewing betel nut*

F. Traditional Medical Skills

- 1) *Modern medical skills*
- 2) *Traditional medicine/midwifery*

G. Church Related Organisational Skills

- 1) Singing
- 2) Leading in prayer
- 3) Arranging Church meetings
 - i) Sunday services
 - ii) Children's meetings
 - iii) Women's meetings
 - iv) Leading Christian worship
 - v) Financial management

H. Communication and Numeracy Skills

- 1) *story telling*
- 2) *reading*
- 3) *writing*
- 4) *calculating*

I. Technical Skills

- 1) *riding a motor-bike*
- 2) *using a calculator*
- 3) *using TV, video, radio, tape recorder*
- 4) *using a mobile phone*
 - i) Phoning
 - ii) Texting
 - iii) Taking photos

4. Taxonomy of Dayak Ngaju Christian Women's Skills in Rainbow Village

A. Housekeeping

1) *Cooking*

- i) lighting a wood fire
- ii) lighting a kerosene stove
- iii) boiling water
- iv) making tea/coffee
- v) cooking meals
 - a) cooking rice
 - b) preparing spices
 - c) cooking a chicken
 - d) cooking fish
 1. de-scaling it
 2. gutting it
 3. chopping it
 4. frying or boiling it
 - e) cooking vegetables
 - f) cooking pork
- vi) making traditional remedies
- viii) washing dishes

2) *Washing and Cleaning*

- i) sweeping the house
- ii) sweeping the yard
- iii) washing the floor
- iv) washing the clothes

3) *Domestic animal husbandry*

- i) keeping chicken
- ii) keeping pigs (12 families)
- iii) keeping dogs

iv) keeping cows (1 family)

4) *Sewing and mending*

B. Subsistence Skills (Providing Food)

1) *Cultivate land*

i) Grow a few vegetables

2) *Fishing*

i) Fish farming (19 families)

ii) 'Mamisi' – with a rod

iii) Catching fish with bare hands

C. Generating Income

1) *Rubber tapping*

i) getting to the plantation

a) canoe

ii) cut the bark (tap the rubber)

iii) collect the sap (latex)

iv) leave to set in container

v) transport to river

vi) calculate the price

vii) sell on to buyer

2) *Planting rubber*

3) *Collecting rattan*

4) *Retailing*

i) Selling groceries etc. from home-shop

ii) Selling iced-drinks from home-shop

iii) Packaging and selling goods (sealing plastic bags with a candle flame)

5) *Making Traditional Crafts (3 grandmothers)*

i) traditional baskets and mats

6) *Felling timber*

7) *Collecting 'teken-parai' roots from the forest (sold for traditional medicine)*

8) *Fish farming (19 families)*

D Child rearing Skills

- 1) *breast feeding*
- 2) *bathing babies and toddlers*
- 3) *nursing babies and toddlers*
- 4) *feeding/minding toddlers*
- 5) *disciplining children*

E. Recreational Skills

- 1) *badminton*
- 2) *chewing betel nut*

F. Medical Skills

- 1) *Traditional midwifery skills*
- 2) *Traditional remedies*

G. Church Related Organisational Skills

- 1) *Church meetings*
 - i) *Sunday services*
 - ii) *Children's meetings*
 - iii) *Mid-week meetings*
- 2) *Financial management*

H. Communication and Numeracy Skills

- 1) *Story telling*
- 2) *reading*
- 3) *writing*
- 4) *calculating*

I. Technical Skills

- 1) *riding a motor-bike*
- 2) *using a calculator*
- 3) *using TV, video, radio, tape recorder*
- 4) *using a mobile phone*

Appendix 3

Pen portraits of the key participants

All the participants have been given pseudonyms.

One Ox village:

Mama Wona was in her forties, and married to Bapak Wona. Their eldest married daughter, Wona, (eighteen/nineteen years) her husband Marty (early thirties) and their daughter (born August 2008), lived with them, plus two younger unmarried daughters, Lucy eleven years and Wendy four years. Lucy was at school in the city, where they also owned a small house and where Mother stayed sometimes with Lucy during term time. Sometimes Wona went down to stay with her and sometimes an Aunt would look after her. In the village they all earned their living from the forest, mainly from rubber tapping. They also had a 'warung' (small shop) in the front room of the house. Mama and Bapak Wona had completed primary school education. Wona and Marty had completed nine years of compulsory schooling but had not completed school years 10 – 12. Bapak Wona's parents, now well in their eighties lived next door with a married son, daughter-in-law, Mandy with their adopted baby.

Mama Lena was in her forties as was her husband. They have six living children and one who died as a child. Two of the children were married, one with a baby but they lived in the town. Only the youngest two children were still at home in the village, both attending the local primary school. Both Mama and Bapak Lena had completed further education diplomas in economics, at a college in a larger town in the province. It was there that they had met. Now their main source of income was from growing and tapping rubber.

Mama Edwin was sixty two and a widow. She had eight living children, two others had died at birth or soon after. All but the youngest two children were married with their own families. All of her children had completed primary school but only one had completed lower secondary education, to year 9. She had twentyone grandchildren. The younger unmarried son, earned his living from timber and rubber in the forest and still lived at home. The youngest daughter was still at secondary school in year 11 so stayed with her older, married siblings in term time and returned home in the holidays. There was no secondary school in One Ox village. Mama Edwin was still able to look after her fields and to do all the normal work of a Ngaju Dayak village women. She and her late husband had completed primary school but not continued.

Mama Ray was in her forties. She had three children, none of whom were yet married. The eldest two were students taking diploma courses at the State University and the youngest was at home and in primary school. Mama Ray was the headmistress of the primary school and her husband earned his living locally from the forest and sometimes helped with some building projects.

Mama Yanti and her husband were in their forties and had six children. Three boys and three girls. The eldest is a daughter who started a course at university in the Provincial capital in August 2007. The other two older children were at secondary school in the same city living with grandparents. The younger three were still at home in One Ox village, with the two in primary school and youngest just three years old. They had a shop up until my last visit, when they had closed it. They earn their living from rubber and from the forest. Her husband was skilled in making the hard-wood roof slates traditionally used on all the roofs of Dayak houses, but now virtually unobtainable due to restrictions on the logging of hard woods. Mama Natan was a skilled weaver and still made traditional baskets and mats. They had both had primary school education.

Mama Natan was forty five years old and her husband was fifty. She had five children, two of whom were married and one, **Mama Merry**, had a two year old daughter. Three were unmarried of whom one was still at school, in the final year of lower secondary school. All of the family appeared to live together in the parents recently enlarged house. They all lived off the forest but had a flourishing shop at the front of the house where all the family helped to sell meat balls and iced drinks.

Mama Sony was in her early thirties and married. Her husband gained his living from the forest. They had three primary school aged children.

Mama Yuli was in her forties and married to a primary school teacher. They had three teen-age daughters, two of whom had trained to be teachers but had not obtained teaching jobs when I was there. They taught in the Sunday School.

Hilltop village

Ibu Laura aged thirty five lived with her husband who a year or two older. They had four children, the youngest was three years old, the next two were in the local primary school, and the eldest, – Laura had moved to another area to live with relatives in order to continue her schooling. She was twelve years old. Ibu Laura had completed twelve years

of education. She had gone to a vocational secondary school and studied economics. But now she worked to keep the family by subsistence farming. Her husband was a jobbing builder, doing whatever work he could find in the village.

Ibu Wilson was fifty three years old and her husband sixty three. They had eight children. The eldest was married with one child but not did not live in the village. The youngest two were at home and both in the upper secondary school. Ibu Wilson had completed Primary school under the old Dutch system. One of their daughters had continued on to university and had stayed on in the city after graduating. Another daughter had failed to complete upper secondary school but was doing well, working in another town. The other children had all dropped out of secondary school and were working in different villages, mainly in gold panning from the rivers, which was how Ibu Wilson and her husband made their living. One son, still at secondary school goes rubber tapping. The family have many trees that have been long neglected. Ibu Wilson is also the village dressmaker. She is self taught and very successful.

Ibu Dani was a widow with six living children. She had given birth to eight. All but one were married. The youngest son was still at the upper secondary school. She had ten grandchildren. Her husband had been a goldsmith and he taught Ibu Dani who passed the skill on to her children. Ibu Dani was skilled at traditional weaving. She made traditional baskets and mats for the floor.

Ibu Rensi was a Primary school teacher in Hilltop village. She came from village further up the river. She was twenty seven years old and had been married one year. She had her first child during my time in the area. Her husband earns his living panning gold from the rivers and still lives up river in the village. One sister lives with Ibu Rensi in order to complete her secondary schooling. Ibu Rensi trained in the city to diploma level. She is the eldest of six children. The next two siblings married at around fourteen to fifteen years after completing year 9 at school. One of these has two children and the other has one.

Ibu Anton is in her thirties and is married to a Javanese man. She had two sons in years 7 and 8 respectively at the local secondary school. He husband drives a 'taxi'. Bringing goods or people in and out of the village. They have a 'warung' in the front of their house. Ibu Anton's parents are still very active farmers, growing rice, rubber, vegetables and so forth. The parents live in village with Ibu Anton's and her family.

Rainbow village

Indu Raymond was in her early fifties. She had five children. The eldest, Raymond was married with a five year old daughter. His wife was in her early twenties. The other four children had all continued on to higher education. The eldest son, daughter-in-law and child live with them. The other four children are still partly based at home although they are at university in another city. They earn their living from the forest and now mainly from a warung in front of the house. Raymond is more entrepreneurial and begun fish farming among other schemes.

Indu Joni was fifty nine years old and had seven children all of whom had continued to the end of year 12 and on then on to higher education. Five of them were married and two still single. She had a number of grandchildren. They earned their living from the forest.

Indu Helen was forty five years old with five children who had all finished twelve years of schooling and one had continued to higher education. Two children were married, each with a child. One of the married children lived with Indu and Bapak Helen. Three children were still single. They too gained their living from the forest.

Indu Ana was thirty nine years old and had four girls who had all continued their schooling so far. The eldest had just started at university. Beside earning a living from the forest and fish farming they also kept cows.

Appendix 4

Profile of Villages

Hilltop Village. October 2008.

Category	Male	Female	Total	Approx. Percentages	Source
No. of households			266		Kecamatan Office (Households = extended families)
No. of people	1,645	1,440	3,085		
Ethnicity					
Dayak Ngaju				60	
Banjarese				30	
Javanese				10	
Other				-	
Religion					
Christian (Protestant)				50	
Christian (R.C)				0	
Christian (other)				0	
Hindu-Kaharingan				30	
Muslim				20	
Christian GKE					Church statistics from local minister
No. of Households			153		
Baptised members			851		
Confirmed members			612		
Full Time Education					
Primary School 1					
No. of pupils			224		Official School Statistics posted in staff-room
No. of teachers	2	7	9		Oct.2008
No. of classes					
Religious affiliation					
Christian			94		
Hindu-Kaharingan			95		
Islam			35		
Primary School 2					Official School Statistics posted in staff-room
No. of pupils	132	115	247		Oct.2008
No. of teachers	6	8	14		
No. of classes			7		

Religious affiliation					
Christian	67	63	130		
Hindu-Kaharingan	18	11	29		
Islam	40	42	82		
Lower Secondary School					
No. of pupils			200		
No. of teachers			12		
No. of classes			6		
Religious affiliation					
Christian			N/A	70	Approx no's from Deputy Heads memory
Hindu-Kaharingan			N/A	20	
Islam			N/A	10	
Upper Secondary School					
No. of pupils			230		
No. of teachers	7	7	14		
No. of classes			6		
Religious affiliation					
Christian			75%		Approximate percentages from teachers
Hindu-Kaharingan			20%		
Islam			5%		

General Information			Source
Distance from Palangka Raya	Approx 200 Kms		Local 'taxi' driver
Means of transport	'Kijang' (Mini-bus) 4-wheel drive 'Ranger'		Personal experience
Approx. journey time	5-6 hours		Personal experience
Main sources of income	Rubber tapping, rice growing	45%	Kecamatan Office
	Gold from rivers	35%	
	Trade	20% (15% incomers, 5% locals)	

One Ox Village Oct 2008

General	Male	Female	Total	Approx. Percentages	Source
No. of Households			169		Village Head
No. of people	432	404	836		
Ethnicity					
Dayak Ngaju			154		
Banjarese			10		
Javanese			4/5		
Other					
Religion					
Christian (Protestant)			73		
Christian (R.C)			12		
Christian (other)			-		
Hindu-Kaharingan			64		
Muslim			10		
Others			22		
Christian GKE					
No. of Households			40		Head of Church Congregation
Baptised members					
Confirmed members					
Full Time Education					
Primary School					Village Head
No. of pupils			124		
No. of teachers			9		
No. of classes			6		
Religious affiliation					
Christian			60%		
Hindu-Kaharingan			+30%		
Islam			4/5%		

General Information			Source
Distance from Palangka Raya	Approx. 200 Klm.		Taxi driver
Means of transport	4 wheel-drive vehicles		
Approx. journey time	4-6 hours		Personal experience
Main sources of income	Rubber tapping		Village Head

One Rainbow Village Oct 2008

General	Male	Female	Total	Approx. Percentages	Source
No. of Households			44+		Village Head
No. of people			165		
Ethnicity					
Dayak Ngaju					
Banjarese					
Javanese		2	2		
Other (Ma'anyan)		1	1		
Other (Ba'kumpai)		1	1		
Religion					
Christian (Protestant)			159		Head of Church (Congregation 31 families in Rainbow, 6 just outside village)
Christian (R.C)			-		
Christian (other)			-		
Hindu-Kaharingan			7 families		
Muslim			6 families		
Christian GKE					
No. of Households			37		
Baptised members					
Confirmed members			91		
Total no. members			159		
Full Time Education					
Primary School					
No. of pupils	25	11	36		
No. of teachers/staff	0	9	9		
No. of classes			6		
Religious affiliation					
Christian			27		
Hindu-Kaharingan			3		
Islam			6		

General Information		Source
Distance from Palangka Raya	Under 10 Kms	Head of Church Congregation
Means of transport	Motor bike	Nova
Approx. journey time	30 minutes	Nova
Main sources of income	Rubber tapping, fishing, local port	Head of Church Congregation

