

Four Techniques used to Measure Child Labour in May 1985

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Working Paper AE 3/86

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Excerpt from:

"Through the Looking-glass. Participant Observation with Children in Southern Africa". Paper delivered at a Workshop on the Ethnography of Childhood, July 1986, King's College, Cambridge.

Inevitably records, no matter how thorough, fail to reflect the complexity of reality. Where there is access to a variety of records, where it may be assumed that knowledge of many aspects of a situation is commonly shared, or where institutions, sets of symbols, belief patterns can be said to represent people's opinions and/or their heritage then recording techniques can focus on particulars and presume to capture<sup>2</sup> their essence. These conditions seldom hold for children in third world countries. Insufficient is known about the quality and texture of their lives or about the nature of their position in society to excuse researchers from attempting to place the child in context before single issues are focused upon.

My intention in studying children's work in a subsistence economy was to estimate their contribution to family survival. I was particularly interested in the impact that children's work has on the quality of their lives; the extent to which it relieves the burden of women's labour; and the manner in which gender expectations related to work determine children's roles. For a full year, August 1984 to August 1985, I recorded children's work among the Tonga of Omay in the Nyaminyami District which lies on the southern shores of Lake Kariba. The focus of my interest was on the work of children between the ages of ten and fifteen. Adults begin to expect a full labour contribution from children of this age at least during times of peak labour demand or on the domestic front. A census was carried out in a village in Mola and twelve families were randomly selected from amongst those with children aged ten to fifteen.

The twelve families were subjected to close scrutiny through a battery of recording techniques that covered agricultural activities, cash-earning efforts, health, sanitation, water collection and use, income and expenditure, and leisure pursuits. The children who could write kept diaries and helped me to compile lists of local species of flora and fauna and of plants used as wild relish and medicines. We collected stories, riddles, proverbs and songs.

My main method of enquiry was that of participant observation.

However, systematic records over time of labour activities of more than a few persons cannot be kept using this method. I employed two villagers as enumerators and they recorded the activities of the members of the twelve families using two recording techniques: the Twenty-Four Hour Recall and Instant Records. Twelve women, five men, and twenty-four children aged ten to seventeen co-operated over seven months. Each family was visited once in an eight day cycle. Here I shall compare the advantages and disadvantages of four of the recording techniques used. I shall consider this in relation to the harvest period from March to May of 1985.

#### A. Observation

Systematic observation of the sort used by psychologists (where action is recorded every five minutes over a one or two hour period and where conversation, inter-action, mood and related activities are noted) provided the most reliable and comprehensive records of children's work. It was the only way to capture context. It was possible to note relationships between those who gave orders or requests for tasks to be performed and those who received and carried out the work. Ruses for avoiding work, generosity in assuming another's task, and the manner in which children cared for the elderly and the young were observed. The technique allowed for the recording of multiple task performance: one girl was, for example, in charge of a toddler while she prepared relish for the evening and watched over water heating for her father's bath.

Many domestic tasks occur in sequences related one to another. In recall, only one or two tasks in the sequence are mentioned. In the literature on labour much of the work of women and girls is under-represented partly because of tasks are often telescoped. Here is an example. Changu, a ten-year-old girl, was interviewed on her activities during the previous twenty-four hours. She said that after lunch on the previous day she had played with friends at home until 4.00 p.m. She had then taken plates to the stream to wash. At 7.00 p.m. she had eaten supper.

It happened that I had observed her that afternoon between 4.00 and 6.00 p.m. I noted that she had performed eight discrete tasks (though each was to do with water) for the one that she had recalled:

- 4.25 She collected 20 litres of water from a stream half a kilometer away from her homestead.
- 4.45 She lit a fire.  
She heated water for her father's bath.
- 5.00 She piled pots and plates used at the midday meal into a bucket, carried the bucket to the stream taking her little sister with her, and washed the pots and plates.  
She bathed herself.  
She bathed her little sister.
- 5.45 She returned with the pots and plates and unpacked them on to the pot stand.
- 5.50 She collected relish (wild okra) from near her home.

Observation allows one to record the play, songs, laughter or quarrels that accompany work. Adolescents, in particular, use tasks to escape surveillance and meet friends beside the stream or in the bush. The network of friendship winds in and out of task accomplishment.

Observation also enables one to record small acts done by children for adults: these include fetching, carrying, taking messages, relaying requests. Such acts are not defined by adults as 'work' but often are by children. They are important for two reasons. One is that children form strategies in nurturing particular kin relationships and these small acts are important features in their strategic play. The give and take in terms of status, help, exchange of food and companionship are important in both adults' and children's lives. The other reason why they are important is that adults expect children to perform them and thus expect children to be available to carry out their wishes quickly and cheerfully no matter what the children may otherwise be involved in doing.

That is to say, children's activities whether classified as work or play or learning are not accorded importance above the needs of adults. Children, especially girls, need to be on hand. Freedom is wrested sometimes through the use of guises like the need to collect relish from the bush.

The disadvantages of using observation as a technique for recording children's work are obvious. It is too time consuming and too few subjects can be observed. It needs some skill or at least an ability to note many aspects of a situation. It is an imposition on others' lives. It can distort subjects' behaviour. It relies on trust, on the right access, not easily won. Access to some situations may be restricted depending on age and/or sex of the observer.

#### B. Instant Record

The Instant Record is based on random visits to selected households at which time the current activities of all members are recorded. These records produce a series of snap-shots sufficient in number to provide a thorough description of activities which can be analysed according to age, sex and season. The time devoted to a particular task is extrapolated from the percentage of all activities devoted to that task (see Grandin, 1982 for a description of the technique as used in pastoral systems research). The advantages of this technique are that it consumes very little time; it involves minimal imposition on the observed to alter behaviour. The disadvantages include the following: the record depends on the observer's interpretation of the child's actions; no record of the time involved in a task can be made; little sense of the energy expended can be obtained; multiple tasks or sequences are unlikely to be captured; crises of ill-health or family problems are also unlikely to be noted; and access to some situation may be difficult because of restrictions to do with age or sex. The most serious shortcoming is that the enumerator in order to find children, is likely to record children at particular sites like village or field home and thus miss many important activities that occur in the bush or by the stream or near the shops.

Thus activities that involve movement or travel are missed. As children in Mola perform many tasks in the bush (to do with building, collecting relish, foraging, hunting, trapping, cutting grass, collecting firewood) and near fields chasing wild animals, scaring birds) and streams (washing, collecting water, digging for worms) the omission is serious. In observing instants of behaviour at home, the records over-report leisure as children wait for a meal or rest having returned from a task performed elsewhere.

### C. Twenty-Four Hour Recall Data (24HR)

Every eight days willing members of twelve families recalled their activities over the previous twenty-four hours leading up to the moment of recall. Recall over long periods was found to be too fragmentary to yield useful records. One advantage this technique has over the two reported above is that the child gives his/her view of work, leisure, travel and other pursuits. Adult assessments of children's acts can be prejudiced or inaccurate. For example, adults in Mola include neither childcare nor the running of errands in their definitions of work. Children include both in their definitions. In recalling their work, children can say how tiresome or tiring they found a task. Adolescent girls often expressed their weariness with their burden of labour and their impatience at the extent to which it restricts their movements and curtails their freedom.

Recall has the advantage of not being bound to certain sites, and restrictions placed on observers based on sex or age do not apply. The disadvantages are serious. Accuracy depends on the child's memory of the previous twenty-four hours and the child's estimate of how long tasks took. The child can (and does) censor activities, especially hunting, trapping and lover's trysts. For example, the Tonga face heavy penalties for hunting or trapping wildgame and are unlikely to report such activities although they are important to children as part of their leisure pursuits, their search for food, and their display of prowess.

It was only after the children had known me for a year that they began to tell me where they hunted, what they hunted, how they made traps, and with whom they shared their spoils. Secrecy surrounds the use of products of the wild for medicine and, again, the activities involved in their collection are only revealed once trust has been established. Naturally, lovers trysts are not reported.

Leisure activities are likely to be forgotten, especially short spells of play. Self-care activities are over-emphasised as they are used as punctuation marks in the passage of time. Repetitive tasks, like releasing goats from their pens each morning, are likely to be over-looked. Sequences of activities tend to be reported by reference to only one task in the sequence. Small acts are seldom recalled.

Tables 1, 2 and 3 give data as noted for just one Instant Record and one 24HR for each of the twenty four children during the harvest period. The data mean very little on their own but they illustrate the different perspectives that each technique gives to children's activities. For example:

1. The Instant Record captures fewer activities at the stream or store or in the bush;
2. The Instant Record notes a greater percentage of activities to do with leisure than does the 24HR record.
3. The 24 HR records greater percentages of activities to do with work, travel and self-care than does the Instant Record.

In effect, one technique may exaggerate leisure while another exaggerates self-care activities. One may miss many work activities but the other may, through self-selection of activities recalled, exaggerate the amount of work done. The obvious solution is to employ both techniques except that the 24HR is fairly demanding in terms of time and can lead to problems with respondent and enumerator fatigue. To capture a larger sample of children's work within the context of family labour would be difficult because trust and co-operation is not easily won, at least among Tonga children.

TABLE 1 : INSTANT RECORDS

SITE (at which records taken as % of total)

	HOME	FIELD	STREAM	KIN OR N'BOURS' HOME	BUSH	STORE	TOTAL%
BOYS	42	8	8	42	-	-	100
GIRLS	67	16	-	16	-	-	99

TIME (at which records taken % of total)

	a.m. 9-10	10-11	11-12	p.m. 12-1	1-2	2-3	3-4	4-5
BOYS	1	2	1	1	1	2	2	2
GIRLS	4		2	1	2	1	2	

ACTIVITY (as % of all acts recorded)

	WORK	LEISURE	TRAVEL	SELF- CARE	OTHER	TOTAL
BOYS						
GIRLS						

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BOYS	1	2	1	1	1	2	2	2
GIRLS	4		2	1	2	1	2	

ACTIVITY (as % of all acts recorded)

	WORK							LEISURE			TRAVEL	SELF-CARE	OTHER	TOTAL
	DOMESTIC	FARMING	CHILD-CARE	GARDENING	LIVESTOCK	BUILDING	ERRANDS	PLAYING	TALKING	RESTING				
BOYS	0	11	-	-	-	-	-	11	22	44	-	11	-	99
GIRLS	25	8	-	-	-	-	-	17	0	33	-	17	-	100

TABLE 2 : TWENTY-FOUR-HOUR RECALL

SITE (at which records recalled as % of total)

	Home	Field	Stream	Kin or N'hours' Home	Bush	Store	Total%
BOYS	64	12	12	3	3	5	99
GIRLS	63	12	18	2	5	-	100

ACTIVITY (as % of all acts recalled)

	WORK							LEISURE			TRAVEL	SELF- CARE	OTHER	TOTAL %
	DOMESTIC	FARMING	CHILD-CARE	GARDENING	LIVESTOCK	BUILDING	ERRANDS	PLAYING	TALKING	RESTING				
BOYS	8	8	-	-	1	5	1	7	1	12	9	47	1	100
GIRLS	38	5	0,6	-	-	-	-	0,6	3	8	9	35	0,6	99,8

TIME\* (% working time spent on each category of activity)

	WORK							TOTAL %
	DOMESTIC	FARMING	CHILD-CARE	GARDENING	LIVESTOCK	BUILDING	ERRANDS	
BOYS	7	57	-	-	2	32	2	100
GIRLS	64	35	0,8	-	-	-	-	99,8

TIME (% of a 12 Hour Day spent on each category of work activity)

	WORK							TOTAL %
	DOMESTIC	FARMING	CHILD-CARE	GARDENING	LIVESTOCK	BUILDING	ERRANDS	
BOYS	2	20	-	-	0,7	11	0,7	34,4
GIRLS	29	15	0,4	-	-	-	-	44,4

\*On the days recorded here, boys spent an average of 4,2 hours working and girls 5,3 hours.

Table 3 : Summary of Activities  
as recorded in Tables 1 and 2

		WORK	LEISURE	TRAVEL	SELF-CARE	OTHER	TOTAL%
BOYS	INSTANT	11	77	-	11	-	99
	24HR	23	20	9	47	1	100
GIRLS	INSTANT	33	50	-	17	-	100
	24HR	44	12	9	35	1	101

Pre-structured interviews with adults were administered on among other matters, farm histories and labour. The adults saw the interviews as tiresome and intrusive. Questions often yielded fairly meaningless stereotypic replies. The fact that very few adults are literate and that their fields are scattered far one from another and from their village homes meant that keeping records of farm labour was difficult. One solution was to enlist the help of schoolchildren to record peak labour activity. One child in each of the twelve families recorded the labour involved in carrying the harvest home from the fields to be stored in the granaries at the village homesteads.

The children kept detailed, careful records (we had a number of checks on their accuracy). They had fewer fears than adults of witchcraft (excessive interest in the size of another's harvest is seen to be suspicious behaviour) and were less concerned than adults as to whether Government (via information from me) might cancel drought relief on the basis of healthy harvest records.

Three families transported their grain by vehicle and are not included here. Of the grain harvested by nine families and carried home, 39 women carried 59%; 2 men carried 0.8%; and 42 children carried 40%. Of the children, 30 were girls who carried 28% and 12 were boys who carried 14%. (Distances from fields to granaries varied from 500 meters to over eight kilometers.) Members of the nine nuclear families represented 44% of all the carriers but they carried 71% of the total transported. The boys were on average two years older than the girls and carried an average of 272 kilograms compared to the girls' 208 kilograms. The nine female farmers carried an average of 774 kilograms and their female kin (adults) carried 175 kilograms. The children of the female farmers carried

44% of the total transported by nuclear family members. The amount carried by children represents a significant degree of help in lightening women's labour.

Carrying the harvest home is seen as women's work. Boys help but fewer do than girls. What is of interest here is that the three recording techniques described above captured very little of children's work during this peak labour activity. This is understandable in that there are no set dates for carrying the harvest home so one is not prewarned and cannot post oneself near the granary. A child might recall that he/she helped with the harvest but does not say how much was carried, nor how many journeys were made and over what distance. The eight day cycle for Instant Records and 24HR meant that the three or four days of intense activity could easily be missed.

#### Summary of the Four Techniques

There are advantages and disadvantages to each. Taken alone each could record reality in such a way as to make things seem other than they are. My appeal is for consciousness of the limitations inherent in any recording technique. My suggested insurance is to use a variety of techniques and to innovate in accord with the particular needs involved in studying children.

During the time when the harvest was being carried home three crises in the lives of the children with whom I was working and whose labour I was recording came to my attention. A sixteen-year-old girl fell pregnant and was given medicine from the wild by her mother's mother to abort. The medicine was effective. Nevertheless, her father sent her to stay with her boyfriend's family until compensation had been paid. She stayed there some three months. Another sixteen-year-old girl eloped and set up a new household with her 'husband' in his mother's village complex. Her new home was a quarter of a kilometer from her old home. Two

fourteen-year-old boys (sons of a former chief; the boys are half-brothers) told me that an adult, male kinsman had killed the one boy's mother with witchcraft and was attempting to kill the boys themselves. One of the boy's fears were so great that he left the area to stay with kin elsewhere. Not surprisingly, the crises were not recorded in any of the techniques outlined above. Yet their impact on the four young peoples' lives was profound. The children's families suffered disruption and loss of labour. I am, I suppose, appealing for the use of anthropological techniques to be more widely used in the study of the particulars of children's lives.

Children's work is not easily accessible to measurement. This is so for a number of reasons. In part it is because labour is difficult to measure. In part because children are not accorded full status as members of society and their labour is not fully acknowledged.

Children's labour, besides, varies according to the relative status and wealth of their families; to the composition of the household; to their own sex, health, strength, birth order, and the size of their immediate families. Many tasks are gender specific and work that runs counter to the norm tends to be glossed over or explained away as being but an interim effort: for example, this frequently happens with boys' care of younger siblings. Many tasks demand short spurts of time and energy and are easily missed. Many tasks are of such a routine nature that they tend to be ignored by informant and enumerator. Furthermore, many tasks are supplementary to another's project and therefore it is difficult to estimate the labour given in terms of a final product.

We need some measure of children's labour in areas like the Omay so that policy-makers may take into account the quality and quantity of their work when making decisions that affect their lives. For example, the school calendar should accord with children's and families' needs: major exams should not be held, as they are at present, during the hottest month when food is scarce and labour demands in the

fields are high. sheer survival on a daily basis absorbs a great deal of the time and energy of women and girls leaving little spare for cash-generating activities, club attendance, vegetable gardening, literacy or school involvement. Accurate measures of labour may persuade those in power or those with money to make the distribution of labour - saving devices (grain huskers, grinding with water pumps) a top priority in the district.

The introduction of innovations in agriculture and the care and exploitation of wild animals are being mooted in the district under various programmes such as CAMPFIRE. In order for them to be successful and to avoid placing a greater burden of labour on certain groups in the society, careful consideration of the nature of labour, the returns to labour and individual access to resources needs to be made.

#### Conclusion

Children help to shape society: their contributions cannot be unravelled until they are studied as individuals and not merely as members of the procession through childhood. Foucault persuades us that 'individuals are the vehicles of power, not its point of application' (1972, 98).

For Giddens (1981:64), 'the reproduction of social systems is at every moment a contingent phenomenon which requires explanation'. Children are part of that contingency. I suggest that we must improve our understanding of children's part in social reproduction in order to enhance our knowledge of society. Giddens adds,

Social life, as Max Weber pointed out long ago, is in most circumstances eminently predictable - perhaps more so than are events in the natural world. But this predictability is a skilled accomplishment of lay actors not a phenomenon governed by mechanical forces. The predictable character of the social world is 'made to happen' as a condition and result of the knowledgeable application of rules and resources by actors in the constitution of interaction (1981:64).

He believes that very complex skills are employed by social actors to draw upon and reconstitute the practices 'layered' into institutions in deep time-space (Giddens, 1981:65). We may do well to examine how children acquire those skills and reconstitute society.

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