THE UNIVERSALITY OF AFRICAN MARRIAGE RECONSIDERED: EVIDENCE FROM TURKANA MALES

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Comparative research on marriage patterns in sub-Saharan Africa described marriage as both early and nearly universal (van de Walle 1968). Subsequent studies have partially disproved the first generalization by demonstrating the existence of substantial regional and ethnic variations in age at first marriage (Kaufmann et al. 1988; Lesthaeghe et al. 1989; United Nations 1990). The premise that marriage is universal, however, has generally not been questioned (United Nations 1990:75). In fact, some anthropological studies have emphasized the importance of marriage in African societies and note that everyone is expected to get married (Kuria 1987; Parkin and Nyamwaya 1987:3). In many African societies, men who fail to obtain a wife are sometimes considered less than a full person:

> For African peoples, marriage is the focus of existence. . . . Marriage is a drama in which everyone becomes an actor or actress and not just a spectator. Therefore, marriage is a duty, a requirement from corporate society, a rhythm of life in which everyone must participate. Otherwise, he who does not participate in it is a curse to the community, he is a rebel and law breaker, he is not only abnormal but "under human." Failure to get married under normal circumstances means that the person has rejected society and society rejects him in return. (Mbiti 1969:133)

Thus it is commonly accepted that nearly all males marry eventually, as do females (Antoine and Nanitelamio 1988; United Nations 1990:75-76). For example, in a comparative study covering the period from 1960-1979, Rwabushaija (1991) estimated that less than 3 per cent of females and less than 5 per cent of males in Ghana, Kenya, and Senegal had never been married at age 50 (Table 1). At younger ages, however, the proportion of single males is generally high because African males frequently marry substantially later than females, in part because they need time to collect the necessary bridewealth. Bachelorhood is relatively common among African males under age 30. For example, Lesthaeghe et al. (1989:321-23) found that in the 1970s, between 25 and 40 per cent of males aged 25-29 in Angola, northern Cameroun, Congo, Ghana, mainland Tanzania, and Zaire had never been married. In Côte d'Ivoire, Mali, Mauritania, Liberia, and Senegal, between 42 and 56 per cent of males in this age group had never been married.

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Table 1: Estimated Percentage of Females and Males Married by Age 50, Selected African Countries

Country	Year	Per Cent Married by Age 50	
		Females	Males
Ghana	1960	99.5	96.3
	1970	99.5	96.5
Kenya	1962	98.6	96.3
	1969	97.1	93.9
	1979	97.8	95.0
Senegal	1960	99.6	97.8
	1970	99.8	97.4
	1976	98.4	95.1
	1978	99.4	97.1

Source: Rwabushaija (1991:175-79)

While such national estimates support the notion of the universality of African marriage at older ages, they obscure any ethnic variations. Since both age at first marriage and the proportion single at younger ages are known to vary considerably by ethnic group (Kaufmann et al. 1988; Lesthaeghe et al. 1989), it is reasonable to assume that similar ethnic variations may exist in the proportion who never marry.

This article examines marriage patterns among male Turkana pastoralists of northwestern Kenya[1]: the timing of first marriage, the proportion of males who never marry, and the factors that may affect these two variables. The data are from a sample of over 10,000 South Turkana pastoralists collected by Rada Dyson-Hudson between 1988 and 1993. These data demonstrate that among Turkana marriage is not, in fact, universal: some Turkana men who remain pastoralists choose not to marry; bridewealth requirements force many males to postpone marriage until after age 35; some men cannot yet marry because Turkana norms require their older brothers to marry first; and some leave the pastoral sector before marriage, thereby precluding traditional marriage. Informants indicate that some of the unmarried males who leave the pastoral sector have a nontraditional union, but they don't acquire the large numbers of livestock necessary for a traditional marriage. Because of the dispersion of emigrants it was not possible to study the frequency and stability of these nontraditional unions.

Ethnographic research conducted among the Turkana suggests that age at first marriage is late (Gulliver 1973:373; Little and Leslie 1990:76; and below). Consequently males who die at relatively young ages are likely to die single, and a poor man may even survive to old age without a wife.

THE TURKANA

The Turkana are a group of nomadic livestock herders living in the arid northwestern regions of Kenya, numbering approximately a quarter million. This study is based on data collected among the Ngisonyoka, one of nineteen divisions of the Turkana, with an estimated population of approximately 10,000 (Dyson-Hudson and McCabe 1985; Little and Leslie 1990). The Ngisonyoka Turkana range over a region of approximately 11,000 square kilometers in northwestern Kenya. The territory is generally hot and arid, with soil unsuitable for cultivation, so Ngisonyoka Turkana depend on five species of livestock, including cattle, camels, goats, sheep, and donkeys. Forage for the livestock is sparse and dependent on local rainfall, which is of low predictability in both time and space. The people and their livestock are highly nomadic, moving frequently to seek forage and water. Since each of these livestock species has somewhat different forage and water requirements, the herds make efficient use of the available types of vegetation (Cougenhour et al. 1985). Animals are mainly used for milk, meat, and blood, but some are traded for cereal foods and sugar.

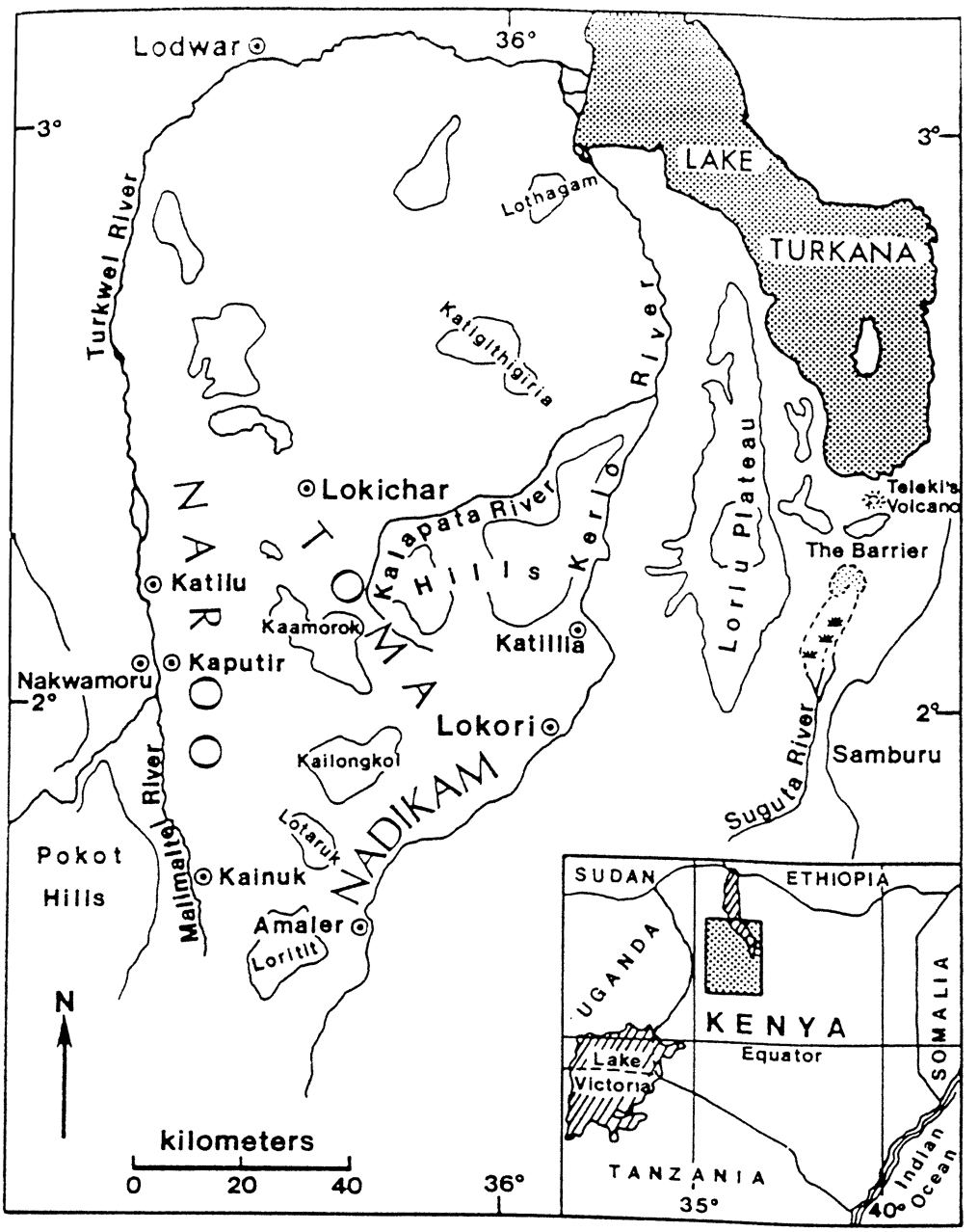
Because of the extreme nomadism of Ngisonyoka Turkana, the basic social unit is the temporary camp (*awi*), which consists of a herd-owner, his wives and children, and all the livestock (Dyson-Hudson and McCabe 1985:70-76). Each wife builds a day hut (*ekol*) within the awi, and this term is generalized to mean the uterine family.

The family herd is controlled by the herd-owner who heads the camp, and each son specializes in the herding and later the management of one particular livestock species. Although specific animals are allocated to the wives for milking, and the herd-owner's sons may acquire de facto ownership of these animals and of animals acquired through their sisters' bridewealth and through gifts from relatives, the herd-owner has the right to take any animals in the herd for his own bridewealth, or to allocate to a new wife. He is, however, constrained by his dependence on the young men for successful management of the multispecies livestock herds.

Each herd-owner moves his camp eight or more times in a given year in response to environmental risks and resources. If forage and water for all species of livestock are not accessible from a single camp, then some animals (e.g., nonmilking camels, cattle, or nonmilking goats) may be sent to satellite camps which move in independent orbits, guarded by the younger family members. Generally, herd-owners will group into neighborhoods of several camps (*adakar*) for protection from animals and bandits and for social purposes. The composition of these neighborhoods is highly ephemeral, since each camp moves in an independent orbit (for detailed examples of migratory paths, see Dyson-Hudson and McCabe 1985).

In summary, the primary survival strategy of Ngisonyoka Turkana is to continuously relocate people and livestock to regions that can provide sufficient forage and water. It is the herd-owner who, based on his assessment of the future needs for water and forage for the livestock, and on the conditions in the present location and elsewhere, decides when and where to move the camp. Other factors,

Figure 1: Map of the Region of South Turkana



Source: Little and Leslie (1990:2)

such as the presence of predators or livestock diseases, or the desire to live near friends, may also affect the decision to move. The welfare of the camp depends predominantly on the skillful decision-making of the herd-owner (Dyson-Hudson and McCabe 1985:277-79; Little and Leslie 1990:36), but also to a certain extent on luck in avoiding wild animals and raiders.

Bad decisions and bad luck lead to livestock losses, which sometimes result in entire polygynous or uterine families moving out of the pastoral sector to seek other means of livelihood. Some move to trading centers in Turkana, some to famine relief centers in northern Turkana, others pan gold or become subsistence agriculturalists along the Turkwel or Kerio Rivers, and still others move to the Kenya highlands to take menial jobs such as bank guard or to herd Nandi cattle. Another reason to leave is what Turkana term "heart"; that the person chooses not to remain in the pastoral sector. It is rare for either of these classes of emigrants to return. Temporary emigration may also occur, particularly during periods of extreme drought, when primarily young men will seek employment in the Highlands to take pressure off the herds and to provide money for food for their families.

The importance of marriage among Turkana is twofold. First, it establishes or reinforces alliances between families (Radcliffe-Brown 1950). Second, marriage gives a man rights to the children a woman bears; without the exchange of bridewealth, all the children belong to the mother's natal family. Marriage and childbearing are necessary for all Turkana men who desire to become independent pastoralists, because both wife and children help with the care and management of the livestock. The Ngisonyoka Turkana system of livestock management is labor intensive. Moving and rebuilding the awi are physically demanding. A child (boy or girl) or an adult watches the animals while they graze during the day; they usually are corralled at night. Labor is needed to drive the animals to the wells and springs, and to lift water from wells which may be up to 60 feet deep at the end of the dry season. Lost animals must be searched for. Women and girls must carry water to the awi for cooking and drinking, up to eight kilometers one way in a dry year. It is not surprising that, as Gulliver (1972, 1973) points out, males and females alike want to have as many children as possible.

Turkana marriage is characterized by the transfer of bridewealth, made up of large animals (cattle and camels) and small stock (sheep and goats), from the family of the groom to the family of the bride, a transaction that may be completed in a single day or stretched over decades. Ngisonyoka Turkana livestock herds are relatively large (Dyson-Hudson 1985), and it is not uncommon for bridewealth to exceed 100 animals (Weinpahl 1984). The father is responsible for the first marriages of his sons from the family herd, and cultural rules of marriage are that the oldest sons of an oldest wife marry in sequence before the sons of a second wife can begin to marry. Because of the high bridewealth, a man may need assistance from close friends and relatives as well from his father. When and whether a man's bridewealth can be paid depends on the size of his father's herd, on the number of older brothers, the number of sisters who bring in bridewealth, the number of dependents in the

camp, and environmental conditions; many men may not be able to marry until they are well into their thirties. A man may also have to compete with his own father, who may prefer to marry another wife himself rather than to give the livestock for the marriage of his sons. Until the sons have established separate herds, the herd-owner retains the right to use any animal to marry another wife, or for other purposes (Gulliver 1973:374; Dyson-Hudson and McCabe 1985:77). Furthermore, a father may try to delay his son's marriage, not wanting him to become an independent herd-owner because the young man is needed to help manage the family herd.

Turkana children and youths grow slowly and mature late (Little et al. 1983), and puberty (*abu akoun*, the testes come) occurs at about seventeen years of age (Leslie, pers. com.). Marriage is late (see below), and premarital sexual activity is common among Turkana males (N. Dyson-Hudson, pers. com.). The latter must be clandestine, for if discovered a seducer is likely to be beaten by the girl's male relatives, who want to ensure that they get a large bridewealth payment for their sister: a man generally is less willing to marry and will not give as much for bridewealth for a wife who has a child by another man.

In Turkana, an unmarried mother is called *apese a ngabuos* (a girl who wears a wife's clothing), in contrast with a full wife (*aberru*). Although Shell-Duncan (1994) found in her interviews with women that there is no stigma associated with premarital births, fathers and brothers apparently have a different point of view: N. Dyson-Hudson, in extensive interviews with men, found that brothers beating up their sisters' lovers, particularly if the lovers were poor men who did not have the livestock to marry the sisters, constituted a major cause of fights.

No bridewealth is paid for an apese a ngabuos. Rather, a substantial pregnancy payment of 30 small stock for the first child and eleven small stock for the next two children must be made by the man to the woman's family. This payment gives him no rights to either the woman or the children. Sometimes an unmarried mother accompanies the father of her children and bears him additional children, and this cohabitation signals the beginning of the marriage process (see below). In some cases, however, the unmarried mother remains with her natal family, and her children are members of her father's clan; they are classified as the children of her mother and father.

DATA AND METHODS

Data collection for the population study of Ngisonyoka Turkana was carried out by Rada Dyson-Hudson over a period of 31 months between June 1988 and December 1993 as a member of the South Turkana Ecosystem Project (STEP), a long-term multidisciplinary study by a research team of ecologists, human biologists, and social scientists. The large database helps fill the gap in demographic knowledge about nomadic Kenyan societies that stems from the exclusion of these sparsely populated regions in northern Kenya from the sample frame of important demo-

graphic surveys, such as the 1977-1978 Kenya World Fertility Survey and the 1989 and 1993 Kenya Demographic and Health Surveys.

Since the extreme nomadism of Ngisonyoka pastoralists precluded the use of standard demographic methods of data collection, the data used in this study are based on reconstructions of genealogies. These genealogies include all the descendants (male and female, living and dead, pastoralists and non-pastoralists) of 61 Elders born between about 1860 and 1915, who are the fathers of the 107 herd-owners sampled during an economic survey carried out in 1982 (Dyson-Hudson 1985).

The aim in collecting these genealogies was to take a sociological census, not to record folk taxonomies or study social correlations of genealogical linkages within the kinship system (Conklin 1964; see also Barnes 1967; Dyke and Morrill 1980; and Hackenberg 1975). Demographic histories were recorded for all descendants, male and female, of all the Elders, as well as wives of the male descendants. Accuracy was ensured by cross-referencing and multiple interviews. Demographic events in each life history can be dated because Ngisonyoka have an events calendar based on specific events in the wet season and dry season of each year, which has been correlated with our calendar back to 1940 by Leslie (Little and Leslie 1990:39, 112-14) and to the early 1900s by R. Dyson-Hudson. Parents tell each child his or her year of birth; most people know the year when their children and their younger siblings were born; and people remember when friends and relatives married, died, or emigrated.

All interviews to reconstruct the genealogies were carried out between December 1989 and September 1991, following a five-month preliminary study in 1988. After data entry was completed, further data checking was carried out between September and December 1993. Interviews were conducted in the Turkana language, working with a native-speaking Turkana who has a remarkable knowledge of the people.

Questioning focused on the members of each polygynous family and each uterine family making up the genealogy. The demographic histories recorded for each member include: 1) whether Ngisonyoka or not; 2) father; 3) mother; 4) name; 5) whether a child is premarital, marital, born after the mother was inherited, or of an adulterous union; 6) sex; 7) year of birth; 8) marital history and beginning year of marriage; 9) alive or dead, with year and cause of death; 10) whether pastoralist or not; 11) for emigrants, when and where he or she left; and 12) notes, which include the member's interactions with his or her pastoralist relatives, whether he or she has returned to the pastoral sector, and other comments. The quality of information about uterine family and age of birth, marriage, and death were coded while entering the data.

Genealogical data collection is particularly appropriate for analysis of population dynamics in pastoral societies, because residence groups are not stable either in terms of membership or geographic location. These genealogical data have important advantages over data collected in demographic surveys and censuses. Genealogies not only provide retrospective longitudinal data covering approximately 50 years, but also cover the entire population, both deceased and surviving. The genealogies are not

selected randomly, and wives enter the sample not at birth but at marriage, so care must be used in statistical analysis.

The total sample of 10,709 persons is considerably more than the total pastoral population of Ngisonyoka Turkana, and in 1990, 5,990 individuals in the genealogies were still living in the pastoral sector. Although some members of the genealogies are from sections other than Ngisonyoka, and the population of South Turkana has grown in the ten years since the census carried out by Ecosystems Ltd., the relatively low frequency of marriage within the genealogical sample suggests that the 1982 South Turkana population estimate of 5,000-8,000 persons (Ecosystems 1984; Little and Leslie 1990:31) was low.

To analyze male marriage behavior, we extracted from the genealogical sample all males who had reached marriageable age (i.e., were born before 1975), including all men who permanently or temporarily left the pastoral sector and those who died pastoralists, but excluding those whose demographic histories were incomplete. For each of the 2,469 males selected, we attached information about their siblings by the same mother and about all cohabiting women. Information about the siblings includes year of birth, whether he or she is a premarital or marital child, whether he or she is still alive, and whether he or she has ever married. The information about cohabiting women includes their year of birth, year of marriage, and year of death.

As in most African societies, identifying wives is complicated due to the processual nature of marriage (Gage and Bledsoe 1994; Meekers 1992). Among Turkana, marriage begins when a woman accompanies (*erukit*) a man to his awi, proceeds through the exchange of bridewealth, and ends when bridewealth payments are completed with a ceremony involving the killing of an ox. But while a wealthy father may insist that all the bridewealth be paid before his daughter leaves his awi, a poor or manipulative man may draw out the bridewealth payments for many years. (The longest in the sample is 24 years.) Until the ox is killed, a woman's status is ambiguous. Sometimes when both father and husband of a woman were interviewed, the father would claim that his daughter was an apese a ngabuos (i.e., that animals he had been given were pregnancy payments), while the husband would claim the woman was his aberru (i.e., that the payments he had made were toward bridewealth). If a man dies before substantial bridewealth has been paid, his brothers may not take responsibility for the woman and her children.

Because of the complexity of Turkana marriage, we use the pragmatic definition for the date of marriage as the year when a woman began to cohabit with a man, whether or not bridewealth had been exchanged. Thus, in our study wives include those who have completed the marriage ceremony, those for whom bridewealth payments have started (but have not necessarily been completed), and apese a ngabuos for whom no bridewealth payments have been made but who live with the father of their children. Only apese a ngabuos who remained in their natal families are considered unmarried and not included in the study.

The dependent variable used in the analysis is a dummy variable indicating whether or not a man has a wife, and the time he remained single. To estimate the

effect of the independent variables on the time until first marriage for Ngisonyoka Turkana males, a Cox proportional hazard model is used. The risk of entering into first marriage is measured by the hazard rate function:

$$h(t) = \frac{\text{Probability of first marrying between t and t+1}}{\text{Probability of first marrying after time t}}$$

$$= h_0(t)e^{b_1x_1 + \ldots + b_kx_k}$$

where the Cox regression model will estimate the coefficients $b_1, \ldots, b_k$ (Computing Resource Center 1992). A positive coefficient corresponds with a higher hazard of first marriage, and consequently with a younger age at first marriage. A negative coefficient indicates a later age at first marriage. These coefficients are converted into relative risks, or hazard ratios, associated with a one-unit change in the independent variable. Because Cox proportional hazard models can handle censored data, this technique is particularly suitable for analyzing this genealogical data.

RESULTS

Our collaborative analysis of the genealogical data shows that among Turkana marriage cannot usefully be viewed as universal: clearly many men cannot or do not marry. Because men marry late, many men die or move out of the pastoral sector before marriage; a few men apparently choose not to marry (see below); and a substantial number of the pastoralists in young age cohorts were unmarried at the time of the study. In this section, we consider the effects on the probability of marriage of the variables 1) age; 2) has an older unmarried brother in the uterine family; 3) is the oldest brother in the uterine family; 4) is a man who "hates women"; 5) has one or more older married sisters in the uterine family; and 6) has one or more younger married sisters in the uterine family. Although we have information on the herd size in 1982 and 1989 of a small sample of Ngisonyoka herd-owners, the relative wealth of adult males has not been determined for all the men in the sample, although it may be possible to do so with additional fieldwork.

Figure 2, showing the distribution of married males by age at first marriage, illustrates that Turkana men marry late: the mean age at first marriage among Turkana, as defined above, is 32.4 (sd 6.9). Less than one out of ten males (9 per cent) married before the age of 25; the large majority of males married between the ages of 25 and 40 (76 per cent); and the remainder married at age 40 or older (14 per cent). (NB: Year of marriage is defined here as the beginning of cohabitation. If it were defined as when the ox was killed and the marriage process completed, average age of marriage would be much higher, and the proportion of unmarried men much higher.)

Figure 2: Distribution of Turkana Males Who Have Ever Married, by Age at First Marriage

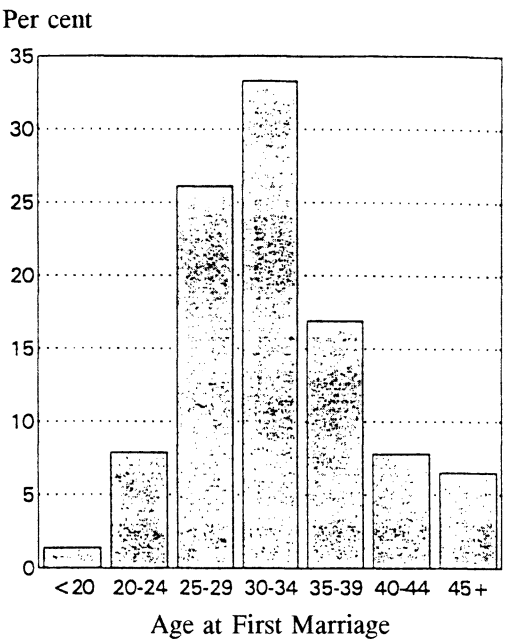


Table 2 shows the percentage of Turkana males who had ever been married by age and residence status. We grouped the sample into men who remained pastoralists (censored at year of interview); men who emigrated out of the pastoral sector (censored at date of emigration, since emigrants cannot, by definition, have a traditional marriage); and men who left the pastoral sector and returned (censored at date of interview). Table 2 (and Table 3, discussed below) shows that the frequency of marriage increases dramatically with age. Among those who never emigrated from the pastoral sector, 33 per cent had ever been married; among those who left the pastoral sector only 13 per cent were married at the time of emigration; and among emigrants who returned to the pastoral sector 44 per cent had ever married. The table indicates that this differential among groups of different residence status depends primarily on differences in age distribution. Because males who leave the pastoral sector tend to do so at a relatively young age, a large proportion of these emigrants are not married, while the high proportion of returned emigrants is best explained by the fact that as a group they are comparatively older.

The percentage distribution of Turkana males by marital status and birth cohort (Table 3) again documents that there is late marriage, showing that Turkana men marry late, and many emigrate or die before they marry. Among adult Turkana males in our sample, 8 per cent died before ever marrying, and 30 per cent emigrated out of the pastoral sector before marriage. Most censuses and surveys of African

Table 2: Percentage of Adult Turkana Males Who Have Ever Been Married by Age and Residence Status

Age	Never Emigrated From Pastoral Sector		Emigrated From Pastoral Sector		Emigrants Who Returned to Pastoral Sector	
	%	N	%	N	%	N
15-19	0.0	251	0.0	116	0.0	19
20-24	0.6	179	0.0	128	0.0	8
25-29	11.0	191	3.7	81	0.0	16
30-34	40.6	106	18.2	44	31.6	19
35-39	63.4	71	28.0	25	50.0	16
40-44	86.5	74	57.1	28	62.5	16
45-49	93.3	45	41.2	17	57.1	7
50-54	91.2	34	66.7	12	90.9	11
55-59	92.3	26	83.3	6	85.7	7
60+	98.6	70	100.0	6	100.0	16
15+	32.5	1047	13.3	463	44.4	135

Notes: Males alive at the time of censoring only; emigrants are grouped by marital status at the time of emigration.

marriage do not enumerate men who die or emigrate, which biases the resulting analyses. Table 3 illustrates this point: censuses and surveys usually only include the information shown in the first two columns of Table 3, which omits 37.5 per cent of the adult males (7.8 per cent who died never married + 29.7 per cent who emigrated before marriage).

The exclusion of these latter data would lead to an overestimate of the frequency of marriage, suggesting that the universality of marriage is, in part, an artifact of the method of data collection. The problem of omitting men who died never having married is most marked for older cohorts: Table 3 also shows that among men born more than 40 years ago, more than 15 per cent died never having married. Since emigration among Turkana is strongly related to environmental conditions, the proportion of males who emigrate before marriage varies from year to year. For example, for the cohort born 30-40 years ago (born 1942-1951), 26 per cent of males moved out of the pastoral sector unmarried, compared to 42 per cent for the cohort born 20-30 years ago (born 1952-1961). The high rate of emigration for the latter cohort is almost certainly because an exceptionally harsh drought between 1979 and 1981 caused many people, but particularly young men, to leave the pastoral sector.

Table 3: Percentage Distribution of Adult Turkana Male Pastoralists, by Marital Status and Birth Cohort

Year of Birth	Ever Married	Never Married	Died Never Married	Emigrated Never Married	N of Cases
1862-1921	76.5	0.0	18.5	5.0	119
1922-1941	61.8	2.4	13.5	22.4	340
1942-1951	50.7	8.2	14.8	26.3	270
1952-1961	24.0	24.9	9.2	42.0	491
1962-1971	2.8	62.2	2.6	32.5	619
1972+	0.0	74.2	0.3	25.5	330
Total	26.4	36.1	7.8	29.7	2169

In Tables 4 through 9, we examine the following social correlates of marriage: age, having a married older full brother, being the first son in the uterine family, "hating women," and having married older and younger full sisters. First, we consider marital status of older full brothers. Because of the Turkana norm that within each uterine family sons must marry in sequence of age, we would expect the data to show that males who have an unmarried older brother would not be married. (The importance of having half-brothers is being examined in an ongoing study of polygyny.) Table 4 shows that this is, in fact, the case: of the 426 males who have one or more unmarried older brothers, less than 10 per cent are married, compared to 57 per cent of those who do not have any unmarried older brothers. The ethnographic data collected during the population study show that at the time of the survey, 42 males (9.9 per cent out of 426) are married although one or more of their older brothers are still unmarried. Because some of these 42 males are from the same uterine family, this corresponds with 35 families in which the norm was violated:

a) In four families the older brother was reported as "hating women." Of the four reported as "hating women," two had left the pastoral sector, and two remained pastoralists.

b) In four families, the oldest sons were born before their mother's marriage. The bridewealth animals for sons born before their mother's marriage come not from their mother's husband's herd, but rather from their grandfather's herd. The chances of marriage of these "children of the dancing ground" are poor, because they must compete for animals with their mother's brothers, who usually are much older.

c) In fifteen families, the older brother chose to go to the Highlands, although the family had livestock. Twelve of these men were reported as having left because of *etau* (heart), and two were reported as leaving their animals and going to the Highlands. One went visiting his brother, got drunk, and was run over by a truck.

d) In two cases, the oldest son emigrated to the Turkwel River and didn't return. One was reported as leaving because of "heart," and one went because most of his goats died, and his father was angry.

e) In one case, the oldest brother went to the District Center and wouldn't return. This man was reported to be a wanderer and hated the work of livestock.

f) Four families sent their oldest sons to the Highlands for antisocial behavior. Three boys were reported as being thieves, and one man had committed adultery.

g) Two oldest sons clearly were ineligible for marriage, as follows: one was retarded; and one had an infected leg amputated in hospital, and remained in the Highlands.

h) One oldest son was reported as delaying marriage until he had enough livestock. This man was said to be "getting livestock together for marriage. He doesn't want to seduce girls." It was not clear whether he was being prudent and trying to avoid pregnancy payments, or whether he also "hated women."

i) In the two remaining cases (discussed below), the reason the older brother was unmarried is less clear. One, the son of a poor man who was living with and depending on the goodwill of his maternal uncle, was a troublemaker who had impregnated the daughter of his guardian's best friend, and also the wife of a sterile son of the major South Turkana ritual specialist. His younger brother had just begun to accompany a girl in 1990, so it was not clear if this marriage would last. In the other case, the oldest and the youngest sons of the uterine family were married, but the reason the three middle brothers went to the Highlands unmarried was reported as hunger (i.e., lack of livestock).

Table 4: Percentage of Turkana Males (by Birth Cohort) Who Ever Married, by Whether or Not They Have an Unmarried Older Brother

Year of Birth	No Unmarried Older Brothers		One or More Unmarried Older Brothers	
	%	N	%	N
1862-1921	100.0	88	100.0	3
1922-1941	97.5	200	83.3	18
1942-1951	88.7	142	64.7	17
1952-1961	60.2	176	18.8	64
1962-1971	7.1	225	0.6	177
1972+	0.0	98	0.0	147
Total	57.2	929	9.9	426

Note: Excludes males who had never been married when they died or when they left the pastoral sector.

The above are extreme examples because the older brother was still unmarried at the time of censoring. There is considerable flexibility in the system, particularly in wealthy families, in that fathers may allow a younger son to begin the marriage process somewhat before his older brother, though he may not complete the marriage process. For example, one younger brother impregnated the daughter of a man whom his father wanted as an in-law, so was allowed to begin marriage three years before his older brother. In another case, when an older twin chose to go to the Highlands, leaving his younger brother in charge of the herds, the younger brother accompanied a woman, fathered five children, and paid all the bridewealth, but did not kill the ox until his older twin returned and married eight years later.

Differentials in the proportion married between first sons and subsequent sons in the uterine family are considered next (Table 5). Among first sons, 48 per cent have ever married compared to 39 per cent for subsequent sons. This differential persists after breakdown by birth cohort, and is a reflection of the cultural rule that older sons marry first.

Table 5: Percentage of Turkana Males (by Birth Cohort) Who Ever Married, by Whether or Not They Are the Oldest Son in the Uterine Family

Year of Birth	Oldest Son in Uterine Family		Subsequent Son in Uterine Family	
	%	N	%	N
1862-1921	100.0	44	100.0	47
1922-1941	98.9	89	94.6	129
1942-1951	94.3	53	82.1	106
1952-1961	61.0	82	43.0	158
1962-1971	6.6	152	2.8	250
1972+	0.0	82	0.0	163
Total	48.2	502	38.8	853

Note: Excludes males who had never been married when they died or when they left the pastoral sector.

In the course of interviews, some men were reported as "hating women." Turkana use the term *ekabangabangait* for these men, which was explained as "men who think they are women," and refers to a transsexual or homosexual orientation. Table 6 shows that, not surprisingly, men in this category are very much less likely to be married. Of the twelve men who "hate women" (which include two pairs of full brothers), only two were married. One man (born 1936), two of whose younger brothers had married in 1974 and 1975, was married in 1989 to woman who had been impregnated by one of his younger half-brothers. In 1990, the wife had a

second child which was reported to be fathered by her husband. The other man (born 1937) married a woman in October 1990, and there were no children at the time of last interview in July 1991. He had a younger brother who accompanied a woman in 1978, but could not complete the marriage process until the older brother was married.

Nine of the other men who "hated women" were unmarried, and one (born 1929) went to the Highlands unmarried in 1956. In 1973 he accompanied a woman who had had four children. She then had three more children, and the two returned to Turkana, to the Turkwel River, in 1988. It is not clear if these last three children were fathered by the man who "hated women."

Table 6: Percentage of Turkana Males (by Birth Cohort) Who Ever Married, by Whether or Not They "Hate Women"

Year of Birth	Does Not Hate Women		Does Hate Women	
	%	N	%	N
1862-1921	100.0	91	-	0
1922-1941	97.6	212	50.0	6
1942-1951	87.3	157	0.0	2
1952-1961	50.0	236	0.0	4
1962-1971	4.2	402	-	0
1972+	0.0	245	-	0
Total	42.4	1343	25.0	12

Note: Excludes males who had never been married when they died or when they left the pastoral sector.

Next we consider the relationship between male marriage and having married female siblings. We predicted that there would be a positive relationship between married sisters and brothers' marriage, because these sisters would provide incoming bridewealth that should increase the ability of their brothers to marry. Older married sisters were expected to be of less benefit to a man than younger married sisters because their bridewealth would probably go for the marriage of older brothers.

Tables 7 and 8 appear to support this hypothesis. Having one or more married older sisters seems to confer no advantage for male marriage (46 per cent vs. 43 per cent), while having a younger married sister appears to increase chances of a man's marrying. (Of the men having one or more married younger sisters, 76 per cent are married, as compared to 24 per cent of those who do not have younger married sisters.) However, this apparent difference may be caused by difference in the age of these groups of males. Those males who have a married younger sister are older

and therefore more likely to be married than those men without a younger married sister. After accounting for birth cohort, Table 8 shows that differences in the percentage ever married are small.

Table 7: Percentage of Turkana Males (by Birth Cohort) Who Ever Married, by Whether or Not They Have Any Married Older Sisters

Year of Birth	No Married Older Sisters		One or More Married Older Sisters	
	%	N	%	N
1862-1921	100.0	58	100.0	33
1922-1941	97.4	113	95.2	105
1942-1951	84.5	71	87.5	88
1952-1961	50.5	101	48.2	139
1962-1971	3.7	217	4.9	185
1972+	0.0	175	0.0	70
Total	43.3	735	46.1	620

Note: Excludes males who had never been married when they died or when they left the pastoral sector.

Table 8: Percentage of Turkana Males (by Birth Cohort) Who Ever Married, by Whether or Not They Have Any Married Younger Sisters.

Year of Birth	No Married Younger Sisters		One or More Married Younger Sisters	
	%	N	%	N
1862-1921	100.0	34	100.0	57
1922-1941	95.5	66	96.7	152
1942-1951	76.3	59	92.0	100
1952-1961	45.4	119	52.9	121
1962-1971	3.2	348	11.1	54
1972+	0.0	244	0.0	1
Total	23.8	870	75.5	485

Note: Excludes males who had never been married when they died or when they left the pastoral sector.

Using Cox proportional hazard models, we estimate the effect of these control variables—age, having a married older brother, being the first son in the uterine family, "hating women," and having married older and younger sisters—on the duration until first marriage among Turkana men. The results are presented as hazard ratios in Table 9. Column 1 shows the bivariate effects without controlling for the other variables. The results show that the probability of marrying does not vary significantly by birth cohort; men who have an unmarried older brother are only 38 per cent as likely to have married as men who do not have an unmarried older brother; first sons are 60 per cent more likely to have married than subsequent sons; and having a younger (but not older) married sister significantly increases a man's ability to get married. Men who "hate women" are least likely to get married. The multivariate effects, shown in column 2, indicate that a man's chances of being married are reduced significantly if he has an unmarried older brother, if he is not the first son in the uterine family, and if he "hates women," even after controlling for birth cohort. Contrary to the bivariate results, the multivariate analysis shows that having a married older sister increases a man's chances of getting married, while having a younger married sister has no significant effect. The importance of older sisters for a man's marriage does not show up in the bivariate analysis because first sons (whose chances of marrying are greatest) are less likely to have older sisters, married or unmarried.

Table 9: Cox Proportional Hazard Model Estimates of the Effect of Control Variables on Male First Marriage

	Bivariate Hazard Ratios	Multivariate Hazard Ratios
	(1)	(2)
Year of Birth	.999	1.002
Has Unmarried Older Brother(s)	.384***	.411***
Oldest Son in Uterine Family	1.601***	1.487***
Has Married Younger Sister(s)	1.214**	1.151
Has Married Older Sister(s)	1.061	1.322***
Hates Women	.086***	.070***

*** $p<.01$, ** $p<.05$, * $p<.10$

DISCUSSION

Marriage is important for Turkana men who wish to become independent pastoralists because women and children are necessary to help with the care and management of the livestock. Therefore it is the ideal of every Turkana man to

marry. The data presented in this study suggest that, as suggested by Meillassoux (1975), among Turkana the older generations control the younger by holding on to the bridewealth as long as possible. Among Ngisonyoka Turkana, a son's dependence on the family herd for the high bridewealth payment clearly delays his marriage and ties him to his father's herds even when he is a grown man and a skilled herd manager and his labor is of great value to his father.

Polygyny and large bridewealth payments among Turkana result in shortages of livestock, and lead to competition between fathers and sons, and between full and half-brothers. Such competition is undesirable because the successful management of herds requires co-operation between members of the polygynous family. The cultural rules clearly defining the sequence of eligibility for marriage of sons structure and control this competition. Our data show that although there is some flexibility in individual cases, overall the norm of sequential marriage of sons is followed.

Younger brothers cannot escape the hierarchy imposed by sequence of marriage, and cannot succeed in the pastoral sector. If a man accompanies a woman but does not have the livestock to complete the bridewealth payments and to kill the ox, the bridewealth for his daughters goes to the woman's father and brothers, not to him. One possible escape—acquiring livestock by raiding—was an important source of livestock before 1979. However, the rules of raiding were that all the livestock that a son was allocated from his first raid had to be given to his father: they would go to the family herd, and to the bridewealth of his older brothers, if any. The only options for younger sons are to co-operate in managing the family herd and wait their turn for marriage, or to leave the pastoral sector—but alternative economic activities available to Turkana men are not in general rewarding.

CONCLUSIONS

These findings indicate that the notion that marriage is nearly universal in sub-Saharan Africa is an overgeneralization. In many studies, the universality of marriage is an artifact of the methods of data collection, since both census and survey data exclude emigrants and people who have died. The idea of universality of marriage also is based on emic statements of what people aspire to, but may not actually achieve until late in life, and sometimes not at all.

A large sample of genealogical data including both emigrants and the dead allows us to make a quantitative analysis of both marriage and non-marriage among Turkana. We have been able to demonstrate the importance of biological factors (age), and social factors (family position and marriage of siblings) in ability to marry, and relate this to subsistence activities and cultural norms.

Extensive knowledge of the Turkana people and specific ethnographic data allowed us to understand the social context of marriage, while our experience with large-scale demographic data sets was essential for analyzing the complex quantitative genealogical data in order to test the hypotheses derived from the ethnographic data. This study shows how quantitative and ethnographic data can supplement one

another, and demonstrates the value of interdisciplinary collaboration between anthropologists and demographers.

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