

Modernization and Aging in the Third and Fourth World: Views from the Rural Hinterland in Nepal

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Introduction

THE NUMBER OF AGED PEOPLE in Third World countries is increasing dramatically. In 1970, 190 million people on this planet were 65 years old or more. Fifty-five percent (105 million) resided in developed countries (DCs) and 45% (85 million) in less developed countries (LDCs). By the year 2000, as a result of continued population growth and improvements in health care, this proportion will change. There will then be about 396 million persons 65 years of age or older (a nearly 200% increase), of whom 166 million (42%) will reside in DCs and 230 million (58%) in LDCs. Moreover, by 2000, in the short span of 30 years, South Asia and East Asia will account for about one-fourth (100 million) of the world's aged, and as many elderly people will live there as now exist in the entire developed world (Hauser 1976). This pattern of population increase will affect Nepal as well. Based on current growth rates, by the year 2000, Nepal will contain over 1 million persons aged 65 or over out of a total population of about 18 million.

The prevalent view is that aging in rural, traditional societies is not a problem since the aged in such societies are viewed as possessing high status. The aged are said to become problematic only as modernization disrupts family and community supports and the esteem and respect characteristic of traditional societies. This widely held viewpoint is exemplified by the theory of modernization and aging proposed by Cowgill and Holmes (1972) and Cowgill (1974). This theory defines modernization and its consequences for the elderly in the following terms:

Modernization is the transformation of a total society from a relatively rural way of life based on animate power, limited technology, relatively undifferentiated institutions, parochial and traditional outlook and values, toward a predominately urban way of life based on inanimate sources of power, highly developed scientific technology, highly differentiated institutions matched by segmented individual roles, and a cosmopolitan outlook which emphasizes efficiency and progress. [Cowgill 1974:127]

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... the introduction of modern health technology, modern economic technology, urbanization and rising levels of education ... tend to have a depressing effect on the status of the aged in society (140) ... the theory holds that with increasing modernization the status of older people declines. [ibid.:124]

This theory predicts that poor, preindustrial countries like Nepal need concern themselves little with problems of the elderly. Ninety-six percent of Nepal's population are rural agriculturalists, and the impact of health, education, and urbanization has been small, particularly in the hills and mountains where most of the population lives. Economic production and distribution in the hills is still based entirely on animal and human muscle power, and there are virtually no roads. Nepal is classified as a part of the Fourth World, the group of poorest and least developed nations among the LDCs. Thus, despite the increases in the number of elderly projected for a country such as Nepal, given the absence of modernization there, it would be reasonable to assume that the elderly will be absorbed in the traditional manner.

We suggest that this view of the process of aging and the state of the aged in Third and Fourth World countries is questionable and requires clarification. First, it is not clear precisely what is meant by "high status." Cowgill and Holmes (1972) do not define the concept explicitly, although they use it mainly to refer to high prestige and social standing. As we shall indicate below, the high-prestige component of "status" is only one of several important factors that must be considered if we are to understand the manner in which the elderly live cross-culturally. Second, the contemporary world is so intertwined that changes in the areas adjoining the backward and rural areas of Third and Fourth World countries like Nepal can have important effects on the situation and status of the elderly in these rural areas. The indirect impact of modernization and change on the situation of the elderly can be substantial even in the most remote and unmodernized areas. Third, this viewpoint assumes a high status for the elderly in traditional societies, an assumption that is not documented and that may be a misleading overgeneralization.

Although there is an amazing paucity of empirical data on the state of the elderly in traditional societies, Simmons (1945) discusses preindustrial societies in which the status of the elderly does not appear to be particularly high. Moreover, significant intracultural differences such as class, ethni-

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city, and caste are present in traditional peasant societies. Bengtson et al. (1975:689) also have critiqued the modernization and aging theory discussed above as suffering "from a romanticized or naive portrayal of eldership in pre-industrial societies." While this appraisal has merit, the data they present in support of it may be inappropriate. Bengtson et al. cite Harlan's (1968) article on aging in India. In this paper, Harlan attacks the idea that the status of the elderly was or is higher in preindustrial societies than in urban-industrial areas and that the contemporary problems of the aged are consequences of urbanism and industrialism. He argues that while each of the villages he mentioned is a "pre-industrial agricultural community, little affected by urbanization," the elderly occupy precarious positions (ibid.:475). He describes Burail, the key village in his study, as follows:

The village is on a low hill near the center of its partially irrigated fields. It has no electricity, telephone, or sanitary system; water for household use is obtained by rope and bucket from deep wells. A rough dirt road leads out to an asphalt road one-half mile away, and thence to the fringes of the city at a distance of two miles more. [470]

Although Harlan suggests that there is little reason to think that the situation in Burail was different when he studied it than it was several generations earlier, the India he studied is hardly a traditional preindustrial society. India makes its own airplanes, automobiles, textiles, televisions, etc.; has a nationwide system of air, rail, and road communication; and has governmental programs throughout the country, especially in the area he studied. Furthermore, Burail's location a few kilometers from a major city makes it untypical of even rural India villages. We suggest, therefore, that Harlan's data may well exemplify not "traditional" society as he and Bengtson argue, but a type of village society that has remained rural and nonmodernized by the normal indices of modernization, yet has been seriously affected by modernization around it.

We suggest also that many, or most, areas such as these would be better termed "impacted" communities, i.e., communities that have been indirectly affected by modernization and the world economic system. Thus, the status of the elderly in traditional societies is confused by the common, but unfounded, equation of the poor, backward rural communities of the Third and Fourth World with traditional societies. Absence of overt indices of modernization does not imply absence of impact.

In this paper we will explore this indirect impact of change on the status of the elderly in one of the world's most traditional and nonmodernized societies, the Hindu Kingdom of Nepal. It will focus specifically on a community of Sherpas living in the rugged mountain terrain of central Nepal.

The Sherpas of Nepal

Sherpa society presents an excellent setting to examine aging and modernization. Sherpas are the Tibetan-speaking, Buddhist population of mountaineering and trekking fame who inhabit northern areas in east and central Nepal. Sherpas trace their ancestry to Tibetan groups that emigrated about 450 years ago from eastern Tibet to the Solu-Khumbu region of eastern Nepal. The Sherpas of Helambu, in turn, claim descent from Solu-Khumbu.

Helambu, or Yelmu, as it is known in Tibetan, is an area

situated about two days' walk northeast of Kathmandu, the capital of Nepal. It contains Sherpa villages at the higher elevations (1829–2896 m) and Tamang and Brahman-Chetri villages at the lower altitudes. This pilot study was conducted over a six-week period during July through August, 1979, in the contiguous villages of Norbugyang and Pemagyang (both pseudonyms) situated at an altitude of about 2621 m. These two villages together consisted of 75 households of Sherpas containing 373 persons, of whom 257 were in residence at the time of the study.

This area seemed appropriate for several reasons. First, it was rural and agricultural. Second, despite this, it has been suggested (Furer-Haimendorf 1979; Ortner 1978) that elderly Sherpas hold low status. Third, like all Tibetans, they have a precise and universally known age-reckoning system which is directly translatable into Western calendar years.

In this area agriculture is still the basic subsistence strategy and cultivation is done by hand in the traditional way. The area has no roads, telephones, or electricity, although a piped water system to several public taps has been recently established. There are no Western-type health facilities, and the presence of a Nepali-language primary school is a recent phenomenon. Diet is also traditional and the use of manufactured goods is rare. While very important changes—which will be discussed below—have occurred in Helambu over the past few decades, anyone walking through these villages would consider them traditional and preindustrial. Helambu is not modernized or even modernizing in any of the usual meanings of the concept as used earlier by Cowgill (1974). The elderly, therefore, should have "high status" according to Cowgill and Holmes.

Two ethnologists who studied Sherpa society in Solu-Khumbu, however, have suggested that the status of the elderly there is low. Ortner (1978), for example, writes that a basic conflict in Sherpa society pits parents against their children, and that parents when they become old are left propertyless and abandoned. She sees this as one of the "great tragic themes of Sherpa culture" (ibid.:47):

In real life, as one gets old and one's children marry away; as one's property disperses bit by bit with each of their marriages; as one's physical powers, including one's sexuality, wanes; and as the social structural realities of lay life are such that in fact one is not taken care of by one's children but is left to fend for one's self. . . . [ibid.:52]

Furer-Haimendorf (1979:87) writes that "an occasional casualness towards aged parents, though by no means frequent, mars to some extent the otherwise pleasant picture of Sherpa family life."

The Concept of "Status"

Before discussing this apparent contradiction, the meaning of "status of the elderly" must be clarified. The term "status" has not been defined precisely but rather has been used intuitively and can often connote whatever the reader wants. If status is taken to mean only, or primarily, prestige and social standing, the concept has minimal utility for the comparative study of aging and the elderly. In this sense, status is only one component of the total *situation* of the elderly. If, however, high status (prestige) is taken ipso facto to imply health, wealth, and happiness, then the concept is incorrect. We sug-

gest that in addition to prestige (social status), eight dimensions are of equal or greater importance:

1. Biological status (e.g., biological function and biological capacity including physical fitness)
2. Health status (morbidity and mortality)
3. Activity status (i.e., the work and activities actually performed by the elderly)
4. Authority status (power and authority exercised in the community and family)
5. Economic status (the resources and wealth controlled by the elderly)
6. Household status (the type of household situation in which the elderly reside)
7. Psychological status (the degree to which the elderly are satisfied with their personal situation)
8. Ritual status (role played in ritual life)

Each of these aspects of the "status" of the elderly can be operationalized and measured by various means. Each can also vary independently of the others, e.g., physical fitness and activity levels may rank high but economic status may be low, or social status may be high but psychological status may be low. This tentative framework also allows for intrasocietal as well as intersocietal comparisons for each dimension, as well as for eliciting the relationships between these dimensions within a single society.

Another consideration is the widely held belief that the social and psychological status of the elderly is correlated with their ability to perform productive tasks. Cowgill and Holmes (1972:10) have articulated this, stating that "certainly we must expect that the status of the aged will be highest in those societies in which they are able to continue to perform useful and valued functions." Similarly, Osako (n.d.:13), in a bibliographic article on modernization and aging, summarizes the work of Simmons (1945), Cowgill and Holmes (1972), and DeBeauvoir (1972) as follows:

All three volumes stress the importance of distinguishing able-bodied aged and decrepit aged who have stopped being productive. Fortunate able-bodied elderly enjoy power and prestige, but the best that the decrepit can hope for in any society is pity and benign neglect. Many of them suffer from outright contempt and neglect and even abandonment in extreme cases.

Leaf (1973) has also emphasized the importance of activity and work for physical fitness, longevity, and psychological well-being.

Like the "modernization and aging" theory, we suggest that this, too, is potentially misleading. The Sherpa data will indicate clearly that there is no necessary correlation between physical fitness, productive activity, personal satisfaction, and happiness.

The Research: Aged Sherpas

The pilot study in Helambu focused on 37 persons over the age of 50: 12 were in their 50s; 11 in their 60s; 11 in their 70s; and 3 in their 80s. Of these, 60% of the individuals over 60 and 73% of those over 70 lived alone or with a spouse. Thirty-one percent of those over 60, and 33% of those over 70 lived alone. This sample includes 86% of the persons 60 years or older.

One of the first things we noticed about the overall situation of the elderly was the large number of elderly people living

alone. Eleven households (15%) consisted of one elderly person, and in seven of these, the lone elderly person was over 70 years of age. Another six (8%) households consisted of an old couple living alone.

The large number of elderly persons living alone or with an elderly spouse was surprising, given the almost universally accepted belief that the elderly in traditional societies reside with their children, who take care of them as they age and become dependent. Our study revealed that not only were a substantial proportion of the elderly living alone, they appeared physically fit, active, and self-reliant. Almost all were engaged in heavy work, either agricultural fieldwork or carrying heavy loads. None of the elderly living alone had servants, and each cooked, cleaned, and worked for himself or herself. All but one owned land in the village.

A fundamental shortcoming in the literature on cross-cultural aging is the lack of attention given to actual behavior. The focus in anthropology and sociology has been on the emic perspective; on what informants say and think about aging, on the cognitive and normative systems rather than on what the elderly actually do. It is likely, therefore, that the stereotypical view of the hale, hearty, and happy elderly in traditional societies is an artifact of "ideal" culture, and that empirical investigation of actual social and economic behavior could yield results very different than commonly supposed. Therefore, in our pilot study we tried to investigate and measure what the elderly do.

We conducted an activity-work survey of 30 different elderly persons aged 50 and over, using recall interviews on 15 different days during the peak agricultural season, yielding a total of 69 person-days of activity. The subjects in this survey were asked to enumerate all their activities and meals for the previous day, and this was supplemented with spot-check direct observation. Since Western time concepts are not well developed in this society, and since very few persons had (and could use) watches, the time dimension was organized according to the Sherpas' own division of daily time. They discussed their activities with reference to the four daily meals. For example, they would normally state that they had worked in the fields from the second meal (about 10 a.m.) to the third meal (about 3 p.m.). The time spent performing activities such as field work was estimated based on the average length of time (as we measured it) between these culturally delimited meal times. Categorizing work and activity into five general types yielded the following activity-level ranking:

1. Heavy work
 - a. Agricultural field labor
(Agricultural field labor during the period of observation consisted almost entirely of digging up potatoes. Sherpas use an iron hoe with an inwardly curved blade to do this. The handle is about .6 m long and the blade about 5 cm × .3 m. To use this implement, the worker must bend over almost horizontally from the waist and dig in that position.)
 - b. Carrying loads
(This involved either a basket of potatoes, leaves, or fertilizer; a brass jug of water; or a load of firewood or grass. The lightest load we spot-measured was 14.4 kg and the heaviest was 34.7 kg.)
2. Moderate work
(This consisted of herding, milking animals, feeding

animals, cutting loads of grass (but not carrying it back), carrying meals to the field for workers, and collecting mushrooms in the forest.)

3. Household work

(This involves a variety of tasks such as cooking, cleaning, washing clothes, drying potatoes, cleaning the stable, etc.)

4. Wage labor

(Two types were observed: government-office work (one person) and construction-carpentry work.)

5. Craft labor

(Making wooden bins, weaving mats, sewing, etc.)

This ranking illustrates the heavy work performed by the elderly subjects. Ninety-one percent of the person-days worked by men and 87% of those worked by women including heavy labor, defined as at least one instance of either carrying a heavy load or field work. The data show also that there is no significant difference between the heavy labor patterns of the elderly 50 years of age and those 70 and 80 years of age. These findings indicate that elderly persons 70 years and over are as likely to do field work and carry loads as those 50 years of age. When agricultural work was performed, the average number of hours worked was 4.1 hours a day for males and 3.6 hours a day for females.

Although stress tests and formal health surveys have not yet been conducted, a number of factors indicate that these elderly possess good health status and physical fitness. Systolic and diastolic blood pressure did not increase significantly with age and the average blood pressure for males over 60 was 114/77, and for females over 60 it was 125/86. Virtually none of the elderly had Heberden's or Bouchard's nodes,¹ and all had full movement of their fingers. There was only one case of partial blindness (the 87-year-old man mentioned below) and no deafness or overt senility at all. The elderly communicated clearly and had no apparent thought or memory disorders. Only one male was too ill to perform heavy labor during the period we observed; he was hypertensive and appeared to have recently suffered a heart attack.

A typical day in the life of the eldest male in the village is illustrative of the vitality and self-reliance the elderly generally exhibit. Dorje Jakri is 87 years old. He had three sons and two daughters, but all three sons have died. His wife died three years ago at the age of 80, and he now lives alone, although his adult grandsons (son's sons and their families) also live in the village. He does all his housework and cooking, gets his own water and firewood, and works in his fields although he has let out most of the land he owns on a lease basis. On the day we interviewed him, he indicated that on the previous day he had performed the following activities.

He got up late when others in the village were already up and about. He walked to the water tap near his house and got a full jug of water (about 15.8 kg) which he carried back to his household. Then he made a fire, boiled water, and churned a pot of Tibetan-style tea (tea with salt and butter). He reheated the previous night's leftovers (rice and potatoes) and ate that with the tea as his first meal. After this he went to one of his fields to dig potatoes. He carried back a load of about 14.4 kg and commented that he thinks he misses a lot of the potatoes since he is virtually blind in his left eye. He then walked back to his field carrying a load of manure which he spread on the field in preparation for planting radishes. Then he returned

home and spread out the potatoes he had carried back earlier on the porch to dry. After this he walked to the water tap, washed his hands and feet, returned home, and again made a fire. He cooked a pot of potatoes and ate them with salt and hot chili for his second meal. He also had one cup of locally distilled liquor (*rakshi*) with the meal. After washing the pots he again went to the field this time to plant radishes. He worked at this for three or four hours and then returned to his home where he repacked the potatoes he had left out earlier and carried them into the house. It was about 4 p.m. by then. He drank another cup of liquor and ate the leftovers from his second meal. He didn't go back to the fields to work any more and stayed home for the remainder of the day and cooked dinner in the evening.

Despite their high level of economically productive activity, their relative physical fitness, and their ownership of agricultural land, many elderly Helambu Sherpas overtly expressed unhappiness with their lot. Several spontaneously volunteered that they wished they were dead, and others commented that their children had abandoned them and that the young in general did not care about the elderly. Almost all of those living alone drank home-brew liquor daily and a few consumed three or more cups per day.

These negative feelings existed even though being elderly was *not* considered a low social status. On the contrary, Tibetan and Buddhist culture confers high social status on the elderly. Ideally, it is a time when the trials and tribulations of obtaining subsistence shift to one's children and a process of disengagement is begun that culminates in death and rebirth. Tibetan norms and values hold that one's parents in particular, and the elderly in general, should be respected.²

While the positive cultural ideal regarding the elderly is never completely realized with respect to individual elderly in specific Tibetan populations, the Sherpas of Helambu (and apparently Solu-Khumbu) seem to deviate markedly in that so many of the elderly persons over 60 either lived alone or with a spouse, even though in most instances they had children or grandchildren living in the village. Other Tibetan societies for which data exist do not exhibit this pattern. In Limi, a remote Tibetan-speaking area in northwest Nepal, studied by Goldstein (1975, 1976, 1978), only one elderly male lived alone in the village of Tsang; all others (except one old Tibetan refugee) lived with children or close relatives in extended families. The elderly, moreover, were treated with respect and held authority and social status. In Dzinga, another Tibetan area three days south of Limi, none lived alone. Ross (personal communication) reports that the 21 persons over 60 years of age (8% of the total population) reside in 13 households, of which 10 include married children with their spouses and children, 2 contain unmarried children, and one female has no household, residing with her employers. In Kyilung, a Ladakhi village studied by Goldstein in 1980, which has recently begun to undergo significant socioeconomic changes, 69% of the 77 elderly Buddhist persons over 60 lived with sons, 9% with daughters, 13% as old couples, 3% alone, and 6% with other relatives.

Several possible explanations exist for this apparent contradiction. First, it is possible that Sherpas are not typical examples of Tibetan culture and the current status of the elderly may be merely a reflection of their different traditional value

and normative system. Second, important changes may have occurred in the recent past that have affected Sherpa society and culture and altered traditional patterns. This is consonant with the Cowgill and Holmes theory in the sense that it holds that things were better for the elderly in traditional society, but at the same time is at variance with it since Nepal and the Helambu Sherpas are not "modernized" by any definition of the concept.

The data argue that the latter alternative is the major causal factor, i.e., that major changes that have influenced Solu-Khumbu and Helambu are transforming traditional Sherpa social organization and the norms and values associated with it. The psychological and emotional malaise expressed by many Sherpas stems precisely from a discrepancy between traditional expectations and the actual social reality with which the elderly must now cope. What are these changes?

The Indirect Impact of Modernization among Sherpas

Nepal was closed to foreign travelers until 1951 and to mountaineers until 1953. Nevertheless, important changes had already begun to have an impact on the social and economic life of the Sherpa area of Solu-Khumbu 50 years earlier. The first Sherpas used in mountaineering as high-altitude porters were recruited in Darjeeling, India in 1909 (Miller 1965:245), and it is clear that a number of Sherpas had already emigrated to Darjeeling by that year. Miller (ibid.) cites a figure of 3,450 Sherpas resident in Darjeeling district in 1901, 5,295 in 1941, and 8,998 in 1951. Furer-Haimendorf (1979:4) has estimated that by 1947 there were about 7,000 Sherpas in Darjeeling district.

The main impetus for this migration appears to have been the wage-labor opportunities offered by portering on mountain-climbing expeditions and trekking parties, recruitment for which centered in Darjeeling until Nepal opened in 1953.

How Sherpas came to settle at Darjeeling is not known in detail, but it would seem that at first it was the prospect of trade which drew Sherpas to Darjeeling and Kalimpong and that the association with mountaineering enterprises occurred at a time when they had already established themselves in the Darjeeling District. The first of these settlers belonged perhaps to the wave of emigrants from Solu who were responsible for the establishment of Sherpa communities in the Nepalese districts of Bhojpur and Dhankuta as well as in the region immediately east of the Nepal-Darjeeling border. But once the news of the earnings of expedition porters spread to Khumbu, many enterprising young men, some alone and some accompanied by their wives, went to seek their fortunes in Darjeeling. There are few families in Khumbu which cannot name one kinsman or another settled in Darjeeling and when I started to compile genealogies and family histories, I was told of the men and women living there. [Furer-Haimendorf 1975:85]

The impact of these new economic opportunities and the associated out-migration have been devastating for traditional Sherpa family structure. Furer-Haimendorf and Ortner have both commented on the prevalence and centrality of nuclear families among the Sherpas of Khumbu and Solu. Ortner, in fact, argues that the independent nuclear family is the fundamental atom of Sherpa social structure and sees this dominance of the nuclear family over the extended family as a major factor producing the plight of the elderly. However, she

sees this not as an outcome of indirect modernization, but as a traditional pattern. We suggest otherwise.

Both Furer-Haimendorf and Ortner have indicated that extended family types are also present, and their statements indicate that they are the cultural ideal for parents. Fraternal polyandry (two or more brothers jointly sharing a wife), for example, is a family type found throughout most of Tibet. According to Furer-Haimendorf (1979:68), it still comprised 8% of the marriages in Khumbu in 1957. Furer-Haimendorf, moreover, writes that Sherpas considered fraternal polyandry a "time-honored and highly respectable device enacted to prevent fragmentation of property and foster the solidarity of brothers . . ." (ibid.). Fraternal polyandry accomplishes this because males in Sherpa and Tibetan society have demand rights to a share of the family's arable land. By marrying polyandrously, they leave this right in abeyance and avoid splitting the family estate. Goldstein (1971, 1975, 1976, 1978) has discussed in detail the motivations underlying brothers' decisions to remain together (marry polyandrously) or marry monogamously, and a key factor is whether brothers perceive that they can supplement their inherited land by other economic activities so that they can attain a comfortable style of life within a reasonable time. Traditionally this was difficult in Tibetan and Sherpa society, but the changes that began six or seven decades ago in Darjeeling appear to have presented just such an opportunity. Furer-Haimendorf comments on the lucriveness of the new economic resources.

To poor but energetic and adventurous young men, expedition work offered unique possibilities. Previously, a Sherpa without land or capital could not hope to attain more than modest prosperity even in a lifetime's hard work. . . . But a successful high-altitude porter could in a single season earn sufficient cash to engage in some modest trade deals or buy his first plot of land. . . . A further complaint by villagers against expedition porters was that many of the younger men used their earnings largely for themselves though they continued to live in a household maintained by the efforts of their brothers who worked on the family's land without having any personal cash income. [1975:86-87]

The growing importance of cash earnings and the corresponding diminishment of the Sherpas' interest in preserving a family's land holdings and herds undivided seems to have affected their attitude toward polyandry. [1979:99]

This new income, first in Darjeeling and later in Nepal, has played a major role in eliminating fraternal polyandry in Khumbu as a form of marriage and family.

The disintegration of the fraternal polyandrous family in Khumbu, however, is not synonymous with the elimination of the extended family. In Tibet, and among Sherpas, the traditional pattern was for at least one son to remain with his parents in their natal home. This remaining son is expected to marry patrilocally, and to care for the parents as they age. When his parents die, he inherits the family name and status and, in addition to his own share of land, inherits their share of land together with the house and other movable possessions. In most Tibetan groups it is the eldest son who remains in the natal homestead, but among Sherpas it appears to be the youngest son. Furer-Haimendorf, Ortner, and Lang and Lang (1971) have all commented on this pattern:

The inheritance rule is such that the youngest son will receive the parental house. He is theoretically obliged to feed and care for the parents out of this last share of their estate. [Ortner:46]

Thus a significant percentage of households in a Sherpa village are composed of three generations. [Ortner:20]

It is the youngest son remaining in the parents' house on whom a father depends for continued support, and such a youngest son is therefore usually most closely attached to his father. [Furer-Haimendorf 1979:86]

Traditionally, therefore, it was the expectation of parents in Solu-Khumbu that they would be living with at least one of their children in their later years, and that they would control a share of arable land until they died.

The history of change in Helambu is not nearly as well known as that in Solu-Khumbu. In fact, little is known about the ethnology of Helambu. Fraternal polyandry appears not to have been traditionally present, but extended families with the youngest son were and are still the ideal.

Helambu is near Kathmandu, and even before the recent construction of the Kathmandu-Lhasa motor road which shortened the traditional three-day walk to Kathmandu by one-to-two days, Helambu was primarily oriented to Kathmandu and not Tibet. This, in conjunction with the greater distance from Darjeeling and the lower altitude at which they reside, are perhaps some of the reasons why Helambu Sherpas were never significantly involved in the mountaineering trade. It appears that substantial emigration from Helambu began much later than in Solu-Khumbu, probably only during World War II. The last 20 years, however, have seen large-scale, long-term out-migration, primarily to India. The modernization of the Indian economic system and the creation and maintenance of an extensive communication/transportation infrastructure via a vast network of roads underlie the migration of Helambu Sherpas, as it is in India's booming mountain-road and office construction industry that most of the Helambu Sherpas are employed. The obvious geopolitical significance of India's northern mountain regions has resulted in a major Indian effort to modernize and integrate politically and economically those areas with the rest of the country. It is this modernization in India that has indirectly affected the remote and backward Sherpa area in the Nepal Himalayas. As was the case in the early period of migration in Solu-Khumbu (Miller 1964), parents in Helambu tried (and still try) to keep their sons and daughters from migrating to Kathmandu and India. But the draw of income, new skills, and excitement, and the avoidance of what young people say is the tedium and harshness of farming, have drawn away substantial numbers from Helambu. Thirty-one percent of the villagers of Pemagyang and Norbugyang are living outside the village on a long-term basis. In the younger age categories this was even higher, with 36% of those between 30 and 40 and 35% of those between 20 and 30 living in India or Kathmandu.

Whatever the causes of this migration, it has produced a tremendous disruption in the Sherpa family system, both in Solu-Khumbu and in Helambu. In Helambu, youngest sons who would otherwise have remained with their parents in extended stem families leave, and even though they often plan someday to return permanently, the likelihood that the traditional extended-family ideal of the elderly can be attained has been seriously diminished. The independence experienced living abroad makes return to a subordinate position in an extended family difficult, and these sons often ask that their share of the land be legally transferred to them while they are living abroad thus depriving the elderly of the double share

that they normally would have held. High mortality among Sherpas has probably exacerbated this situation. Speaking of the Darjeeling Sherpas in 1957, Furer-Haimendorf (1975:85) writes:

Living in quarters little better than the old-fashioned coolie lines of tea gardens, and exposed to contact with the crowds of an Indian bazaar, many Sherpas fell victim to tuberculosis, venereal diseases and other infectious ailments. In the healthy climate and comparative isolation of their mountain homes they had developed no immunity against diseases common in Indian towns. . . .

It is reasonable to suggest that more younger sons die in India than would have died had they remained in Helambu, and demographic research with other traditional Tibetan populations (Goldstein, in press) suggests that once infancy has been survived there is little mortality risk until old age.

The situation with regard to the elderly living alone in Helambu, therefore, does not reflect the traditional cultural pattern. Elderly Sherpas were living alone not because of traditional values and norms but because they had to. Massive emigration has precluded the realization of the extended family since the sons who should be living with the parents are either residing in India, have died untimely deaths there, or have experienced independence and do not wish to live under the direct authority and financial management of their parents. This does not mean that the younger generation no longer cares for or respects their parents. Sons and daughters living abroad send occasional gifts, and the elderly living alone all indicated that elder sons and daughters living in the village or nearby would care for them if they got sick.

Examination of the elderly living alone and as couples reveals, however, that many of them have living children. Of 17 such households, 2 had no children (1 of the households was a nun) and for 2 there is no information. Of the remaining 13 households, 9 have living sons and the other 4 have living daughters. In many cases there were also married grandchildren and/or siblings in the village. This raises an important question. Since family life is valued, in cases where the youngest son is living in India or has died, why then don't the elderly live with their other sons, or with an adult daughter or a married grandchild? The extensive out-migration reported for Helambu cannot, in and of itself, explain the presence of so many elderly folk living alone bitter and unhappy about their "abandonment."

The answer to this question lies in the Sherpa's own definition of dependency. Since dependency and aging are discussed in a separate paper (Beall and Goldstein, in press), we will only mention here that dependency can be conceptualized etically as well as emically. Etically, it is a continuum concept, indicating the degree to which the elderly receive goods and services from others. Emically, from the point of view of the actors, very different types of goods, services, situations, etc., may be categorized as dependency in different societies. The Sherpa example illustrates this.

As elder sons in Helambu marry and separate from their parental household, they receive a share of the land and set up independent nuclear households that are considered jurally distinct from their natal ones. Furer-Haimendorf (1979:86) comments on this for Khumbu Sherpas:

Elder sons and married daughters may visit the parents off and on and bring gifts of food and beer on feast days, but only in exceptional cir-

cumstances will they work for their parents without receiving the usual wage.

If, after all the elder sons separate, the youngest son migrates to India or dies, the elderly couple is left alone. At this point, however, it is considered culturally inappropriate for the elderly to move in with other children even if invited. To do so would be to abdicate their independence and demean their self-esteem. It would mean leaving their own house and turning over their fields to their son (and daughter-in-law). It would mean becoming a powerless appendage to the *son's household*. As in our own society, while "crisis dependency" (Clark 1972) is acceptable, long-term dependency has a strong pejorative connotation. When the indirect impact of modernization produced substantial numbers of old folk in just such a situation, they chose to live alone, despite the fact that they do not want to live that way and are lonely and unhappy with their fate. They are bitter about the recent changes that have caused this transformation but have themselves been unable to ignore or redefine their cultural definition of dependency to accommodate the new situation. The cultural expectations and aspirations of the elderly in Helambu are incongruent with the new reality in which they are immersed. The consequence of this is the anomalous situation of elderly who are hale, healthy, productive, and economically not wanting, but psychologically and emotionally maladapted.

It is interesting to note, however, that certain aspects of the cultural system do appear to be changing. In response to our queries, many of the elderly indicated that they thought small families were better than large families. Their rationale for this was that since one cannot count on children to "look after parents" when they are old (i.e., let parents live with them), the less sons a person has, the more land the parent retains when old, and the more security he or she has.³ It is not surprising that there was general feeling among the old and young that family planning and sterilization were good things. Nonetheless, with respect to their household situation, so long as they are able to function independently, this was the option they grudgingly preferred.

Conclusion

This paper has illustrated the way in which modernization can indirectly influence the social, economic, and cultural life of rural, agricultural areas in Third and Fourth World countries. It demonstrates the manner in which changes in India offered new economic opportunities and life styles and, via out-migration, indirectly weakened the extended family system in Helambu, a rural farming area in the hills of Nepal. This, in turn has seriously affected the situation of the elderly, a large proportion of whom now reside alone. The paper points up, therefore, the growing problem that the increasing number of elderly persons in Asia represent. It cannot be assumed, as the aging-and-modernization theory does, that traditional rural community patterns will accommodate these elderly. Contrary to the commonly held view, the future of the elderly in such areas is anything but rosy.

In this paper we also question another widely held viewpoint concerning the elderly, namely, the view that physical activity, productive work, and life in rugged mountain environments produce elderly who are physically fit, free from debilitating

chronic diseases, and emotionally and psychologically well adjusted to the process of aging. The Helambu data show that emotional and psychological adjustment is not necessarily linked to these factors.

NOTES

¹ Heberden's and Bouchard's nodes are two forms of osteoarthritis, the frequency of which increases with age in U.S. populations. Heberden's nodes are bony prominences at the margins of distal interphalangeal joints, and Bouchard's nodes are bony swellings of the proximal, interphalangeal joints.

² Ortner, however, argues that Tibetan religious literature such as Milarepa's songs portrays the elderly as abused and that this reflects traditional values and behavior. We disagree. This view confuses Buddhist philosophic theory with the "little tradition" and actual village life. Buddhism views life as inherently characterized by misery. Love, marriage, family, children, and the very process of life with its myriad attachments inevitably result in misery. Use of the abandonment of the elderly as an example of this fundamental Buddhist principle is not necessarily representative of real patterns of behavior. It is a symbolic rather than statistical statement. To read it as an empirical statement flies in the face of Tibetans' own verbalized statements and is not supported by other studies of Tibetan communities.

³ More land for the elderly does not necessitate more work for them, as this land can be leased to others who do the work and share the yield, or neighboring Tamang can be hired to do field work.

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