preliminary census results from japan and korea

Census Day was 1 October 1975 for both Japan and the Republic of Korea, and preliminary results from those censuses have just been released. Both countries last conducted censuses in 1970.

JAPAN

Correspondent Hirohiko Koyama of Japan's Bureau of Statistics reports that the preliminary count of the 1975 Population Census of Japan puts the total population at 111,933,818, almost twice as many persons as the 55,960,000 enumerated in Japan's first census in 1920. The population increase since 1970 was 7,270,000, a 6.9 percent increase over the 1970 figure of 104,670,000. The rate of increase for the five-year period was the second highest in 25 years, topped only by the 1950-55 rate of 7.4 percent. Population density of Japan, according to the 1975 figures, is 297 persons per square kilometer.

Some of Japan's 47 prefectures actually lost population between 1970 and 1975. Five prefectures showed lower totals, as compared with 20 prefectures that showed population losses during the 1965-70 period. Of the prefectures that gained population, 20 prefectures—most of which are middle-sized and adjacent to large metropolitan areas—showed higher rates of increase than in the previous census. The rate of population increase has fallen in Tokyo, Kanagawa, Aichi, Osaka, and Hyogo, all centers of large metropolitan areas. But in Ibaraki, Tochigi, and Gunma prefectures (all close to the Tokyo Metropolitan Area) and Shiga and Wakayama prefectures (both near Osaka), higher rates of population increase prevailed. According to Correspondent Koyama, this pattern indicates the "doughnut" phenomenon, or the tendency toward rapid population increases in areas surrounding large metropolitan areas.

Japanese cities with one million or more inhabitants are the "ku" area of Tokyo (8,640,000), Osaka (2,780,000), Yokohama (2,620,000), Nagoya (2,080,000), Kyoto (1,460,000), Kobe (1,360,000), Sapporo (1,240,000), Kitakyushu (1,060,000), Kawasaki (1,020,000), and Fukuoka (1,000,000).

According to the latest census figures, the total number of households in Japan is 32,143,748, showing an increase of 4,050,000 or 14.4 percent over the 1970 census. There are now about 3.48 persons per household, compared with 3.73 per household in the previous census.

KOREA

Korea's Economic Planning Board released preliminary census figures on 30 December 1975. EWPI Research Associate Dr. Chai Bin Park supplied a translation of the release as it was reported in the Korean newspaper Hankook Ilbo.

The total population of the Republic of Korea now numbers 34,688,000, of whom 17,440,000 are males and 17,248,000 are females. The birth rate declined in Korea from a 1970 rate of 3 percent to a current rate of 2.4 percent, and the death rate also dropped from 0.9 percent to 0.7 percent during the five-year period. Accordingly, the rate of population increase went from 2.1 percent in 1970 to 1.7 percent in 1975, and it is estimated that it will become 1.6 percent next year.

The population density of Korea increased by 32 persons per square kilometer, from 319 in 1970 to 351 in 1975. This is the second highest population density in the world (Bangladesh has the highest density), if the urban states are not taken into account. The population per square kilometer of arable land increased from 1,475 in 1970 to 1,547 in 1975, making Korea the country with the highest ratio of population to arable land in the world.

(continued on page 2)
PAKISTAN

- Mr. Syed Sajjad Hussain, Assistant Census Commissioner of Pakistan, sent news from his office that Mr. G. Muctabe Mirza, Joint Census Commissioner, participated in a conference on “Population Measurement Methods” held 5-9 January at the Carolina Population Center in Chapel Hill, North Carolina.

SRI LANKA

- More of the District Reports from Sri Lanka’s 1971 Census have been released, writes Newsletter Correspondent T. Nadarajah. Five of the 22 are now available: Colombo, Matala, Nuwara Eliya, Anuradhapura, and Polonnaruwa. The 22 District Reports will form Volume I of the 1971 Census Report series. The reports contain basic population data for each district including sections on population growth and distribution, age, marital status, ethnic groups and religion, literacy and education, type of economic activity, occupation and industry, unemployment, migration, fertility, and basic data for small areas within the district. The reports are in mimeographed form and for limited distribution only. Mr. Nadarajah added that tabulation of the data for the other districts and for Sri Lanka as a whole has been completed.

SOLOMON ISLANDS

- The second census of the Solomon Islands is scheduled to be held this month, according to the Solomon Islands News Drum, a weekly publication of the Solomon Islands Information Service. Two pilot tests were held prior to the complete enumeration, one in May 1975 and the other in August. The first pilot test covered 4,473 persons in ten areas of the Solomons. The second, simplified trial census was carried out on Guadalcanal and was aimed at “clearing the misunderstanding and transport difficulties experienced during the first pilot census in May.” About 161,000 persons were enumerated during the first Solomons census in 1970.

AUSTRALIA

- The Australian family coding system, described in an earlier issue of this newsletter (August 1975), will undergo a number of changes for the June 1976 census. According to Correspondent Tony Hart, Director of the Population Census Branch of the Australian Bureau of Statistics, the category of “commune” will be added to the existing classifications. “In processing the 1976 schedules,” says Hart, “it is intended that households in which all members indicate that they are members of a commune will be allocated to this new category. All members of such households will be members of the commune, and they will be treated as nonfamily members—i.e., persons outside the Primary Family Unit (PFU) and Secondary Family Unit (SFU) structures.” Hart continues: “We don’t really know as yet how significant this measure is within the Australian context. There has been a great deal of interest, however, in people who opt for a different life style, and the inclusion of the question in the Census was specifically requested by Ms. Elizabeth Reid, our recent adviser on Women’s Affairs to the then Prime Minister.”

NEW ZEALAND

- The New Zealand Demographic Society in conjunction with the University of Waikato recently held a one-day workshop entitled “Recent Population Changes in New Zealand and their Implications.” Topics of papers presented included fertility changes and their implications; demographic and social issues raised by the law and practice relating to contraception, sterilization, and abortion; labor force, economic change, and the role of women; and population policies and social issues. The papers were intended to convey information to members of the general public who attended the seminar and to other persons interested in recent demographic changes in New Zealand.

Japan and Korea (continued from page 1)

Life expectancy for Koreans has increased by 12 years since 1963. It is now about 68 years, about three years more than in 1970. As in most countries, females have a greater life expectancy than males. Life expectancy for women in Korea is about 70 years, after Japan the highest in Asia.

About 16,820,000 persons (48.5 percent of the population) live in urban areas and 17,870,000 (51.5 percent) live in rural areas. The ratio of urban population has increased by 7.4 percent since 1970. About 17.6 percent of the total population lived in the city of Seoul in 1970; that figure increased to 19.8 percent in 1978. Two provinces, Kangwon and Gyeongnam, had population decreases since 1970, down 4,000 and 21,000 persons respectively.

The housing census, which was taken together with the population census, revealed that the number of households increased by 15.5 percent—from 5,657,000 in 1970 to 6,764,000 in 1975. The number of dwellings increased by 10.3 percent during the period (from 4,415,000 to 4,869,000), showing that the number of houses has not kept pace with the number of households. The average number of persons in a household decreased from 5.4 in 1970 to 5.1, reflecting the trend toward the nuclear family.
CALCULATION OF THE EXPONENTIAL FUNCTION: AN ADDENDUM

by Griffith Feeney

A previous note in this Newsletter (Vol. 2, No. 1, p. 7) described a simple tabular method for calculating values of the exponential function $e^x$. The method involves the use of the special table reproduced below. Professor Nathan Keyfitz of Harvard University has subsequently pointed out that a similar table appeared in his book Introduction to the Mathematics of Population (Reading, Massachusetts: Addison-Wesley, 1968). Curiously enough, Keyfitz provided the table for the purpose of calculating natural logarithms. I was gratified indeed to learn of his method, for in writing the original note I had puzzled without success over whether the technique could somehow be extended to the calculation of logarithms. Professor Keyfitz shows us that it can. His technique, discussed on pages 109-110 of his book, is explained below.

The natural logarithm of a number $y$, conventionally denoted $\ln y$ and sometimes $\log ey$, is by definition that number $x$ for which $e^x = y$. Should we desire the natural logarithm of a number that appears exactly in the table below, we may thus read off the value immediately. Given $y = 1.10517$, for example, we locate this value in the first row and second column of the table, which shows it to equal $e^{0.1}$; hence $y = 1.10517 = e^{0.1}$, the natural logarithm of $y$ equals $0.1$, and we write $\ln 1.10517 = 0.1$.

In practice, of course, the number whose logarithm is desired is unlikely to be found exactly in the table. Consider, for example, the problem of determining $\ln 1.51014$. Observe first that the numbers in the table below decrease as one moves up columns and from left to right. This simply reflects the increase of $e^x$ with $x$ and the arrangement of the table. Moving through the table in this way, we see that $1.51014$ falls between $1.49182 = e^{0.4}$ and $1.46872 = e^{0.5}$. It follows that $\ln 1.51014$ falls somewhere between 0.4 and 0.5; the problem is, where? Since it lies between 0.4 and 0.5 the desired natural logarithm may be expressed in the form $0.4 + y_1$, where $y_1$ is a number less than 0.1. We may therefore write $1.51014 = e^{0.4 + y_1} = e^{0.4}e^{y_1}$ and since $e^{0.4} = 1.49182$, we have $e^{y_1} = \frac{1.51014}{1.49182} = 1.01228$.

Since this means that $y_1 = \ln 1.01228$, we have thus shown that

$$\ln 1.51014 = 0.4 + \ln 1.01228.$$  

We now repeat the process described above beginning with the number $1.01228$. This leads to the conclusion that

$$\ln 1.01228 = 0.01 + \ln 1.00221,$$  

which in combination with (1) gives $\ln 1.51014 = 0.41 + \ln 1.00221$. One further repetition, beginning with 1.00221, gives

$$\ln 1.00221 = .0021 + \ln 1.00021$$  

so that $\ln 1.51014 = 0.412 + \ln 1.00021$. One final repetition gives

$$\ln 1.00021 = 0.00022 + \ln 1.00000$$

which, since $\ln 1 = 0$, gives finally $\ln 1.51014 = 0.41220$, which is correct to five decimal places.

The logic of this procedure is a bit subtler than that required for calculating exponential values, but a little practice in application will show that it is just the reverse of the process used to calculate exponential values. Once the technique is mastered, none of the above steps need be written out; one simply moves through the table, dividing each result by the last and writing down successive digits of the desired logarithm.

The method is suitable when electronic calculators (without natural logarithm capability) are available. Where hand calculation or mechanical calculators are used, it will usually be easier to interpolate in tables of the natural logarithm function.

Table of the Exponential Function

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<thead>
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<th>$n$</th>
<th>$e^n$</th>
<th>$e^{n/10}$</th>
<th>$e^{n/100}$</th>
<th>$e^{n/1000}$</th>
<th>$e^{n/10000}$</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2.71828</td>
<td>1.10517</td>
<td>1.01005</td>
<td>1.00100</td>
<td>1.00010</td>
</tr>
<tr>
<td>2</td>
<td>7.38906</td>
<td>1.22140</td>
<td>1.02020</td>
<td>1.00200</td>
<td>1.00020</td>
</tr>
<tr>
<td>3</td>
<td>20.0855</td>
<td>1.34986</td>
<td>1.03046</td>
<td>1.00300</td>
<td>1.00030</td>
</tr>
<tr>
<td>4</td>
<td>54.5982</td>
<td>1.49182</td>
<td>1.04081</td>
<td>1.00401</td>
<td>1.00040</td>
</tr>
<tr>
<td>5</td>
<td>148.413</td>
<td>1.64872</td>
<td>1.05127</td>
<td>1.00501</td>
<td>1.00050</td>
</tr>
<tr>
<td>6</td>
<td>403.429</td>
<td>1.82212</td>
<td>1.06184</td>
<td>1.00602</td>
<td>1.00060</td>
</tr>
<tr>
<td>7</td>
<td>1096.63</td>
<td>2.01375</td>
<td>1.07261</td>
<td>1.00702</td>
<td>1.00070</td>
</tr>
<tr>
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<td>2980.96</td>
<td>2.22554</td>
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<tr>
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<td>2.45960</td>
<td>1.09417</td>
<td>1.00904</td>
<td>1.00090</td>
</tr>
</tbody>
</table>

Dr. Griffith Feeney, right, is Research Associate and Assistant Director for Graduate Study at the East-West Population Institute. He earned his Ph.D. in Demography at the University of California, Berkeley, and his current research interests include mathematical population models, demographic analysis of ethnographic data, and the application of incomplete data estimation techniques. One of his recent publications, "Demographic Concepts and Techniques for the Study of Small Populations," has been reprinted by EWI from Pacific Atoll Populations, edited by Vern Carroll, and is available without charge to newsletter readers.
NUMBERS, NAMES, AND NONAGNATES:
Anthropological Problems in Genealogical and Census Data Collecting

by Richard A. Gould

Richard A. Gould is Professor of Anthropology at the University of Hawaii. He has spent several years doing fieldwork with the Tolowa Indians of northwest California and with the Aborigines of Australia’s western desert. He is currently Consultant to the California Academy of Sciences, where he is designing an anthropology hall that explores the varieties of human adaptation.

In several important ways, social anthropologists and census takers face similar problems in doing their work. Anthropologists often collect census data as part of their fieldwork, though usually on a more localized level than the national or regional scales used by demographers. And they must often confront data collected in cultural settings quite different from their own, in situations where the differences may be so great as to challenge even the basic categories within which the data are collected.

For the anthropologist a census is a means to an end; that is, it serves as one way of discovering the different ways people organize and manipulate their social relationships. For a census taker, however, the census itself is the primary goal. Have anthropologists discovered anything about various kinds of human social behavior that might be useful to the census taker in his efforts to avoid pitfalls and acquire reliable data? This essay will present some of the problems anthropologists have encountered in eliciting and recording census and genealogical data. It is not a systematic or comprehensive survey of such problems, but rather an anecdotal review of some of the more interesting and seemingly odd kinds of human behavior that can affect the accuracy of demographic data in different cultures.

Counting people; or, do people count?

Many people in the world do not count or have numbers for anything beyond a low level. This does not imply that they are mentally deficient. Rather, it has to do with the requirements of life in their particular cultural and physical environment. Some hunter-gatherers simply have no need to count above a certain number, and everything beyond that number is “many.” In Australia’s Western Desert, the Aborigines count as follows:

1. kutju
2. kutjara
3. mankurpa
4. kutjara-kutjara
5. kutjara-mankurpa

many, pini.

That is their entire system of counting! In cases like this, an anthropologist who asks people how old they are is likely to encounter puzzlement or answers like “very old” until he realizes that these people do not reckon chronological age at all. What starts out as a seemingly simple proposition (“Let’s do a census.”) can become a difficult and drawn out process of data collection.

The task is sometimes made easier when the society under study turns out to have strongly developed age-sets or other modes of grouping and classifying people by generation. Such generational classifications, like those, for example, found in many East African herding societies, can offer the census-taking anthropologist an indigenous system for organizing categories that will yield relative ages of individuals. These relative ages can be refined by interviewing back and forth between individuals until everyone is fitted into a fairly precise overall scheme of relative ages.

Government officials seldom have the time or training for such a task and must resort to simpler, albeit less accurate, measures. In 1966 an official of the Western Australian government had the job of determining which Aborigines at the Laverton Reserve were entitled to pensions. To be eligible for a pension in Western Australia, one must be 65 years old, but, of course, the Aborigines could not tell him how old they were, even with the help of an interpreter. So he simply lined up all the elderly Aborigines one day and looked at them—he even looked at their teeth! Any Aborigines who appeared to be 65 years old or more to this official were assigned pensions at that time, even though relative aging and genealogical studies of these same people later on revealed that some of the “pensioners” were not more than 45 years old. Clearly, what you see is not what you get.

Many traditional societies have ways of counting that are unexpected and challenge our ethnocentric preconceptions. Consider the Yuki. These California Indians were studied by A.L. Kroeber, who discovered their octonary system of counting. Instead of counting by fives and tens—that is, on their fingers—these people counted the spaces between their fingers. To accomplish this they sometimes placed sticks between their fingers and counted the sticks. As Kroeber noted, “Naturally enough their ‘hundred’ was 64,” and he further observed that:

The younger men, who have associated with the Americans, seem not to realize that their fathers thought by eights instead of tens, and are so confused in consequence that they give the most contradictory accounts of even the lowest native numerals (Kroeber, 1925:176).

Among the Yuki, too, there was no word denoting any concept equivalent to the calendrical year, so, as Kroeber noted, “[...no one knew his own or anybody’s age.” Pity the poor census taker among the Yuki.

Not only do systems of counting and numbers differ from one society to the next, but also the traditional use of these numbers may affect what one learns in a census. For example, the idea of sacred numbers was, and in some cases still is, common among many North American Indians. On the Northwest Coast the sacred number was five, on the Great Plains it was seven, and elsewhere it tended to be four. These numbers had specific ritual associations that, among other things, determined the number of times a particular chant or dance step might be repeated. More importantly for the census taker, these numbers tend to be used even today whenever doubt or lack of interest exists in the minds of the Indians concerning a number. If asked how old a particular child is, a Northwest Coast Indian man may well reply, “Oh, five.” An alert census taker will probably notice this behavior when he continues to get the same answers to other queries (“How many children has that woman had?” or “How many wives did old so-and-so have?”), but casual interviews can be affected by such a pattern of stereotyped response.
What's in a name?

In 1842 Lewis Henry Morgan, a young lawyer living in Aurore, New York, joined with friends and business associates to form a fraternal society called The Gordian Knot. Such fraternal groups, like the Masons, Odd Fellows, and others, were popular in America then, and their meetings were frequently characterized by elaborate rituals, costumes, handshakes, and other specialized and secret formulae. To obtain ideas for rituals for his newly formed fraternal society, Morgan decided to visit a nearby settlement of Iroquois Indians and observe their rituals and other behavior.

One aspect of Iroquois social life that fascinated Morgan was the system of naming kin. Unlike Americans of European descent, the Iroquois applied the word for "father" not only to one's male parent but also to other male kinsmen. The word for "mother" was also extended in the same manner. Morgan's fascination with Iroquois naming was so keen that he ultimately devoted years of study to this and other Iroquois practices, with the result that in 1851 he published The League of the Ho-dé-no-sau-nee or Iroquois, a book now recognized as the first truly scientific account of an ethnographic society. We do not know what ever became of The Gordian Knot, but Morgan's interest in Iroquois names led directly to the modern social science of anthropology. And his interest in names also led in part to the almost obsessive interest that many anthropologists have shown in kinship studies.

A census taker, like an anthropologist, who confronts non-Western societies must come to terms with traditional rules and behavior of naming, just as Morgan did among the Iroquois. Failure to learn about naming practices can lead to ambiguities in census data and even to outright errors. Anthropologists have discovered this when collecting genealogies, and they have modified their interviewing approaches accordingly.

In many societies the use of nicknames is so common and widespread that it creates confusion from the start. But nicknames are not always a casual matter, as the case of the Akwé-Shavante Indians of Brazil shows. A Shavante boy is not named at birth. Names are bestowed upon him at different stages in his life, and ideally a man should receive at least four names in his lifetime. At initiation boys take their third popular, and ideally receive their fourth when they reach the status of socially adult males. As Anthropologist David Maybury-Lewis points out, the process may not stop even then:

A man may assume further names if he so wishes. Aepwé in Sáo Domingos took the name Rondón when he heard that General Rondón, the benefactor of the Indians, was dead. His people still referred to him as Aepwé, but the old man would answer to Rondón without a ficker. Meanwhile, the Sáo Marcos Shavante worked themselves up into a fury of indignation when I spoke of Aepwé. . . . His name was not really Aepwé, they insisted. He had stolen that name.

His real name was Sipase (Maybury-Lewis, 1974: 233-34).

As if this weren't confusing enough, women's names among the Shavante are so complicated that the anthropologist notes that:

Women can grow up, by Shavante standards, without receiving a name, especially nowadays when name-givings are not frequently held. . . . I am certain that some Shavante women literally did not know what their own names were. One of my hardest tasks when trying to compile genealogical information was to identify the individuals on my charts (Maybury-Lewis, 1974: 234).

The case of the Shavante is somewhat unusual, but problems abound for the unwary collector of genealogies and census data in another area—the widespread practice of name avoidance. This behavior can take different forms. On the island of Tikopia, a Polynesian outlier, children may not utter or indicate knowledge of the names of their living parents. This rule also extends to the utterance of their parents' names by anyone else within range of their hearing. Ideally, on Tikopia, a child first utters his or her parent's name in the dirge sung at the parent's funeral. Needless to say, this practice complicates the collection of census and genealogical data. But even more complicating is the rule, found in many societies, of avoiding the use of names of deceased individuals.

In the Western Desert of Australia, the Aborigines regard the utterance of the name of someone who has died within memory as a serious social faux pas. To get around this, they employ a circumlocution. They use the word "kunmanara" to refer to a living person whose name is the same as that of someone who has died. Sound simple? Since this is a more or less indefinite prohibition, with old names coming back only after a long time, there may be a backlog of people being referred to as "kunmanara," with a resulting ambiguity of reference. Moreover, words in the Western Desert language that are the same as or sound like the name of the dead person will also be dropped from use, with substitutions of new words. The vocabulary is thus in constant flux as these substitutions occur, and an unwary researcher always finds himself in danger of using a word that was recently eliminated. In cases like these, lack of comprehension is the least of the researcher's worries. An identical pattern of name-avoidance behavior is also reported among the East Greenland Eskimo, and variations
on this pattern are widespread in many cultures throughout the world. Everywhere it occurs, name-avoidance behavior makes the collection of genealogical and census data difficult.

Morgan’s study of Iroquois names led him to the discovery that kin terminology reflects the way different societies classify their kinfolk. He embarked upon a worldwide comparative study of kin nomenclature, which led him to define several major types of kin-classification systems. As suggested earlier, some of these systems classify kin according to generational levels (the so-called Hawaiian system epitomizes this tendency), whereas others emphasize the unity of lineages (examples of this type are the Crow and Omaha systems). In the Hawaiian system, a single term may be applied to all the males of one’s own generation, another term for all the females of one’s own generation, another for all the males of one’s father’s generation, and so forth. In the Crow system, one might call one’s father and father’s brother by the same term but address one’s mother’s brother by a different name. The point is that these terms of classification must be discovered by the anthropologist, usually during the process of eliciting genealogies, in order to gain an “insider’s” view of how the particular society under study classifies kin. For the census taker, such an insider’s view of kin terms may help him overcome the limitations imposed by name-avoidance behavior and other problems of identifying individuals by names.

The adoption smokescreen

In many parts of the world, the practice of adoption is common and carried out openly. Such is the case in Polynesia and Japan, where the anthropologist or census taker usually has no difficulty in distinguishing between blood relationships and adoptive relationships. Adoption means that the society has assigned a relationship that takes the place of a blood tie. In many cases adoptions are arranged between people who are already kin, but even when they are not related it matters rather little to the census taker as long as he has access, ultimately, to the reproductive histories of all the people he is studying.

In other places, however, there are cultural factors that can obscure the adoptive relationship when it occurs, and in such cases an unwary census taker might mistake an adoptive for a blood relationship. This appears most dramatically in traditional Chinese communities. Recent studies of Chinese living in rural localities in Hong Kong reveal a pattern of behavior regarding adoption that could easily cause confusion and error in census collection. In traditional Chinese villages, a member of an important lineage must choose an heir if he is unable to produce his own. Ideally, he should seek his adoptive heir from within his own lineage, yet research has shown that a significant number of adoptions occur through the purchase of a male infant from people who are total strangers.

Why should a Chinese male want to seek out an infant for adoption who is not an agnate (i.e., related to him through his male relatives) in preference to one who is? To adopt a nonagnatic son, he must submit to a humiliating initiation ritual involving, among other things, an expensive feast. Regardless of the quality of the banquet, the guests complain about the food and publicly insult the host before they leave. Agnatic adoption, in contrast, is easy and does not involve humiliation or expense. On the surface, at least, nonagnatic adoption would seem to be an undesirable alternative; yet it is widely practiced. Anthropologist James L. Watson interprets this behavior as a response to rivalrous relationships that exist between segments of the same lineage. A man who adopts an heir from within his own lineage may be giving support to his rivals. As Watson points out, a man without an heir will pay almost any price and endure almost any insult to obtain an adoptive heir without, at the same time, having to support rivals within his own lineage. The compelling desire for a male heir stems from a fundamental Chinese concern for maintaining the integrity of the lineage and the related social necessities of having a son to care for one in old age and to perform suitable ancestor worship after one’s death.

In cases of nonagnatic adoption, the adopted son receives full rights of inheritance and lineage membership. Other members of the lineage may grumble and make derogatory remarks about the adopted son to each other but never within hearing of the son himself. Officially, at least, a concerted effort is made by all to treat the nonagnatic adoptee as a bona fide lineage member, an attitude which is, of course, encouraged by the adoptive father. To this end, lineage chroniclers choose not to record cases of nonagnatic adoption, and a conscious effort is made by the adoptive father to obtain his heir from a family that is wholly unknown to the lineage, mainly to insure against later claims by the biological father. Watson describes this process:

As a . . . protection against later claims, the adoption might be arranged through trusted intermediaries who keep the identities of both parties secret. When this method of procurement is unsuitable the searcher will make every effort to buy a son from a family living so far away as possible from [the adoptive father’s village]. The real origin of these outsiders is one of the most closely guarded secrets in the community; adopting fathers never discuss the subject, and they are never asked (Watson, 1975:303).

Given this concern for secrecy, what chance does the census taker have of distinguishing between agnatic and nonagnatic modes of adoption or of learning the biological parentage of a nonagnatic adoptee in a traditional Chinese community?

Nonagnatic adoption in China, like the other examples cited in this essay, should serve as a warning to collectors of genealogical and census data. The anthropological literature abounds with instances of human social behavior and beliefs that confound culturally based “common sense” expectations and that can give rise to ambiguity and error in the basic data employed at a higher level of analysis by demographers. Data gatherers should be sensitive to traditional beliefs and practices, and they should be wary of possible sources of error. Similarly, demographers and other analysts of such data need to be aware of the dangers of leapfrogging to high-level analysis before first verifying the accuracy of their low-level data.

REFERENCES


by Alice D. Harris

New releases from the Philippines

The National Census and Statistics Office (NCSO) of the Republic of the Philippines has just issued the fourth in a series of monographs on population projections in relation to development planning. The study is part of the cooperative UNFPA-NCSO Population Research Project. The monograph, by Demographer Cecilia V. Lacuata, is called Household Projections for the Philippines, 1970-2000. It presents a series of projections of the number of households for the Philippines as a whole and for each province. Households are classified as rural or urban, and the distribution of households by the number of members is projected for the national level for five-year intervals from 1970 to 2000.

The data used for making the projections are from the 1970 Census of Population and Housing in the Philippines, and from the revised population projections that were prepared by NCSO. The monograph begins with a discussion of the importance of household statistics for future development planning. The author then reviews the different methods available for making household projections. She lists the strengths and weaknesses of each technique and explains why she has chosen the two used in this paper. These methods—the household-to-adult population ratio, which projects the total number of households, and the mathematical method, which uses Poisson probabilities to project the number of households by the number of members in each household—are described in detail by Lacuata. In the final section of the monograph, she analyzes the results and draws conclusions about future household growth in the Philippines. If you are interested in household projections, contact the National Census and Statistics Office, Box 779, Manila, Republic of the Philippines, for a free copy of this monograph.

Another new publication from the Philippines is Initiatives in Population, a quarterly magazine published by the Population Center Foundation of the Philippines. The first issue appeared in September 1975. This attractive journal is intended to serve as a link between its readers—planners, policymakers, administrators, researchers, and practitioners in population and family planning—and sources of knowledge in the field. Its articles make good reading for anyone interested in Philippines population activities. Census and statistical agency personnel will be particularly interested in its coverage of demographic data collection and analysis in the Philippines. In the first issue, for example, is a description of a new method of collecting population data designed by Fr. Francis Madigan of Xavier University. The issue also includes an article about the more than 40 public and private agencies that participate in the Philippines population program.

New Population Council journal

While I am mentioning new journals, I cannot forget the Population Council's Population and Development Review, which was first issued in September 1975. Recognizing the interrelationship between population processes and development processes, Editor Paul Demeny states that Population and Development Review will provide a "regular forum for and examination, from a variety of professional perspectives, of the knowledge base that an informed consideration of population policy alternatives requires" (Editor's preface, Vol. 1, No. 1, iv). Articles on community-level population policy, the World Population Plan of Action, Asian cities, and welfare and population in India are included in the first number. Scholarly research and a high literary standard combine to make this review a significant and timely new addition to population literature. To submit manuscripts or be added to the mailing list, direct correspondence to Population and Development Review, The Population Council, 245 Park Avenue, New York, N.Y. 10017.

Second international research document released

Levels and Trends of Mortality in Indonesia, 1961 to 1971, by Larry Heiligman, is the second research document to be published by the International Statistical Programs Center (ISPCC) of the U.S. Bureau of the Census. Foreign statistical agencies or population programs may receive a copy of this paper by writing to the Documentation Branch, ISPCC, Washington, D.C. 20233. Those in the United States may order a copy from the Superintendent of Documents, U.S.
Government Printing Office, Washington, D.C. 20402. The price is US$4.95. The report summarizes mortality trends in Indonesia during the 1960s, presents life tables for males and females in 1961 and 1971, and discusses the effect of mortality change on other demographic variables. Heligman uses adjusted Indonesian census data for 1961 and 1971 to construct life tables using the census survival method (the appendix illustrates the methodology). The author concludes that mortality decline in Indonesia did not parallel that of other Asian countries for a number of reasons related to health and nutrition. Only since 1968 has a real decline in deaths been noted. If this decline continues, says Heligman, agricultural production and family incomes will be adversely affected unless future mortality decline is accompanied by a decline in fertility as well.

Pacific Island censuses

The first volume of the Final Report of the 1973 Gilbert and Ellice Islands Population Census was released in December 1975, and it contains the basic tables and the administrative report for that census. Volume two, which will focus on interpretative material, will be published within the next few months. The Office of the Chief Minister has released tables for 1968. The 1973 census was a de facto enumeration at midnight 8-9 December 1973. The total population numbered 57,813 persons, compared with 53,517 enumerated in 1968. If all those temporarily absent from the Colony were added, the 1973 total would have been 60,468, representing an average annual increase of 1.71 percent for the period 1968-1973. The forthcoming interpretative figures are expected to indicate how important the impact of the family planning program has been on fertility. For copies of one or both volumes of the final report, write to the Gilbert Islands Publications Office, Box 78, Bairiki, Tarawa, Gilbert Islands, Central Pacific. Each volume is priced at Australian $7.80 plus postage charges.

After a delay of several months due to printing problems, the report of the 1973 Census of the Trust Territory of the Pacific Islands, which I mentioned in an earlier newsletter, is now ready for distribution. It can be ordered for US$14.50 from the Printing and Publications Division, Headquarters, Trust Territory of the Pacific Islands, Saipan, Mariana Islands 96950, U.S.A. For air postage add one dollar.

Volume on Pacific atoll populations published

How can demographers and ethnographers assist one another in the study of the population characteristics of small island communities? This was the question posed at a conference sponsored by the East-West Population Institute and held at the East-West Center in Honolulu 27-30 December 1972. Anthropologists and geographers who had fieldwork experience on atolls in the Pacific region joined population specialists from the Institute and the South Pacific Commission to explore ways in which they could collaborate to improve demographic data collection and facilitate comparative population studies. The demographers presented useful sessions on organizing and analyzing field population data; the ethnographers in turn explained some of the peculiarities of collecting statistics in the field. Demographic techniques for coping with inadequate or unusual data were then discussed by the demographers.

The revised papers from this 1972 conference were recently published by the University Press of Hawaii as Pacific Atoll Populations. Volume editor is Dr. Vern Carroll, Associate Professor of Anthropology at the University of Michigan, who was chairperson for the conference. The book has two purposes: it serves both as a guide to demographic techniques and as a source for information on the populations of several Pacific atolls.

Pacific Atoll Populations begins with a chapter by Dr. Carroll that defines the unique characteristics of an atoll population. The next chapter, by Demographer Griffith Feeney, outlines and explains techniques for analyzing population data from field censuses. He uses the results of Carroll's population survey of Nukuo Toatol as examples. Feeney's chapter is concise but comprehensive; his explanations of the demographic measures available to field workers are lucid and well illustrated.

In the next seven chapters, conference participants have provided detailed analyses of the population structure of individual atolls based on their field data. Authors include Tim P. Bayliss-Smith, Vern Carroll, William Davenport, Bernd Lambert, Mac Marshall, and James D. Nason. Each author has placed his atoll population in its temporal and spatial context and has included maps and valuable population figures and tables.

The final chapter, again by Vern Carroll, is addressed primarily to prospective field workers who may be interested in doing surveys of small island populations, but his suggestions for compiling and presenting demographic data would be applicable in other situations as well. Pacific Atoll Populations is the third in the monograph series of the Association for Social Anthropology in Oceania. The book is available for US$20.00 from the University Press of Hawaii, 2840 Kolowalu Street, Honolulu, Hawaii 96822.

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