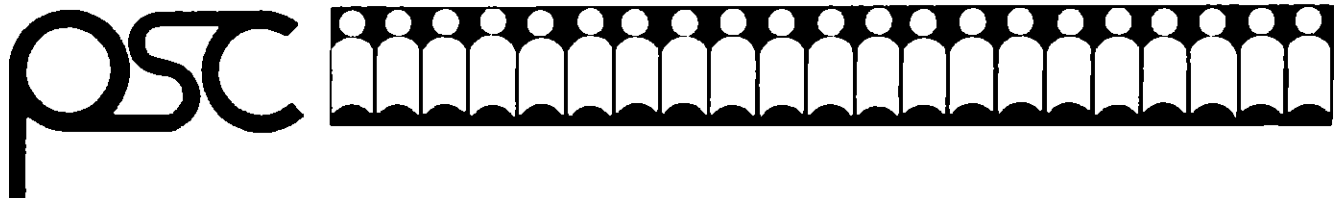


THE UNIVERSITY OF MICHIGAN

**POPULATION  
STUDIES  
CENTER  
1980-1981**



**1980-1981  
Annual Report  
of the  
Population Studies Center**  
*Susan Van Eck, Editor*



**University of Michigan  
1225 S. University  
Ann Arbor, Michigan 48109**

## **TABLE OF CONTENTS**

Director's Statement

Center History

Research

Research Facilities

Demographic Dynamics of the Past

Abstracts of Current Research

Publications

Training Program

Description

Dissertations Completed

Prospectuses Approved

Publications and Achievements

Courses in Demography

Former Students

Service Activities

Staff Roster



# DIRECTOR'S STATEMENT

In March 1981, the Population Association of America held its 50th anniversary meeting and the growth and vitality of the field were clearly evident, both from the large turnout and from the quality and breadth of the presentations. A few months later the Population Studies Center reached its 20th milestone, thus sharing much of the recent past with the leading professional association. The growth of population studies over the last few decades was a strong impetus for the development of specialized centers like that at the University of Michigan. In turn, these centers have contributed significantly to population studies by providing a forum for scholars from diverse disciplines and the specialized facilities necessary to carry on the research, training, and service functions required by a rapidly expanding field.

In many cases the development and maintenance of population centers has been due to a unique partnership of universities, governmental agencies, and private foundations. The history of the Population Studies Center, described in detail on page 3, illustrates this pattern. The Center was started by a grant from the Ford Foundation. The University of Michigan provided the necessary infrastructure and financial assistance at several crucial stages. Governmental agencies, particularly the National Institute of Child Health and Human Development, have supported research and core facilities and have met some of the costs of training. In recent years, foundations have provided the vital margin in easing problems arising from University constraints or government restrictions. Thus a grant from the William and Flora Hewlett Foundation has been the single most important source of funding for foreign students, enabling the Center to continue this important program. An award from the Andrew W. Mellon Foundation for extended post-doctoral research to a few recent Ph.D.'s provides new junior faculty to the Center and a rich professional experience to those selected. The Mellon award has also broadened the Center's interdisciplinary contacts by encouraging collaboration with the University's Reproductive Endocrinology program on joint biomedical and behavioral problems. During the past year the two programs worked together with faculty from a number of departments to identify an important research area which will involve the joint efforts of reproductive biologists, geneticists, anthropologists, and behavioral population specialists from sociology and economics.

Population centers also provide the critical mass necessary for undertaking extended service activities and specialized training programs and for these reasons are

often the focal point for foreign visitors with population interests. In this connection the Population Studies Center was pleased to be visited in March by a delegation from the People's Republic of China representing universities and institutes with a special interest in demography. The visit presented an opportunity to discuss the nature and conduct of population research in the United States and China and the possibilities for collaborative research and training of students. During the Spring two staff members, Ronald and Deborah Freedman, visited the People's Republic in connection with a World Health Organization mission in family planning, which provided further opportunity to explore potential avenues of collaboration. Other visitors during the year included representatives from the Institute of the Sahel in Africa, to discuss training and long term collaboration, and from Visayas State College of Agriculture in the Philippines.

In order to make available the results of our research more quickly, the Center has initiated a *Research Reports* series, with the first 11 publications appearing during 1980-81. A detailed subject matter catalog of our library was started, which will make our holdings more accessible to staff and students. Further improvements in our computing system have added to the efficiency and flexibility of our capability for interactive data processing.

Dr. Lee E. Edlefsen of the University of Washington has accepted an appointment in the Department of Economics and the Population Studies Center. Professor Edlefsen spent a portion of 1980-81 at the Center as a visitor. Dr. William H. Frey from Brown University and the University of Wisconsin joined the Center in May 1981 as a Mellon fellow; Neil Bennett of Princeton has also been appointed as a Mellon fellow and will join the Center in August 1981. Dr. Barbara Entwisle completed the first year of her Mellon fellowship and will continue with the Center during 1981-82. Professor Paul Siegel was on leave at the Population Division, Social Stratification Section, U.S. Bureau of the Census.

The Economic Demography training program was favorably reviewed by a NICHD site visit panel in March 1981, but future funding for this as well as other training programs is still uncertain. As of June 1981, 16 research and related grants totalling \$2,535,000 were in force at the Center, testifying to the productivity of the staff and the diversity of problems undertaken. During 1980-81, 41 students were in residence here: 31 from the Department of Sociology and 10 from Economics; 30 of these students were American and 11 were foreign, representing Asia,

Africa and Latin America.

This report presents in some detail the research currently conducted by staff and students, various facets of our training programs, the nature of the support facilities for both training and research, and the extensive service activities engaged in by our staff. The report is intended for a wide audience: the University community, other population organizations, funding agencies, current and prospective students, and to meet inquiries from the press and

general public. We recognize that it is difficult for a single report to meet the needs of so diverse an audience, and we would be pleased to provide additional information about any aspect of our work.

Albert I. Hermalin  
Director



# CENTER HISTORY

The objectives of the University of Michigan's Population Studies Center are threefold: to foster sound research by staff and students so as to increase the body of reliable knowledge in the population field; to increase the number of American and foreign students trained in population studies; and to assist domestic and foreign organizations and governments in the development of demographic programs, especially in developing countries.

The Population Studies Center grew out of a long tradition of interest in population and human ecology within the Sociology Department, dating from the early 1930s. That interest found notable expression during the post-war baby-boom of the mid 1950s when Professor Ronald Freedman, a member of the Department of Sociology, and Pascal Whelpton, director of the Scripps Foundation for Research in Population Problems, conducted a national survey of women to find out how many children married couples planned to have. The survey provided researchers with important information. Equally important, the survey proved the validity of the methodology: it was the first national survey in which women were directly interviewed about their knowledge, attitudes, and practices regarding contraception. Much subsequent work in fertility is based on the success of this first experiment.

The Population Studies Center was established in 1961

with a \$500,000 grant from the Ford Foundation. In 1965 the Center became one of the three components of the University of Michigan Population Program, which consisted also of the Center for Reproductive Biology, a part of the Medical School, and the Center for Population Planning, a part of the School of Public Health. The latter two components have a bio-medical and public health orientation while the Population Studies Center has a socioeconomic focus.

Through 1977 the Center received continued operational support from the Ford Foundation. This has been supplemented by grants from the Rockefeller Foundation and most recently by a five-year (1981-86) core grant renewal from the National Institute of Child Health and Human Development (NICHD). Individual research projects are supported by a variety of governmental and private sources, notably the NICHD, the National Science Foundation, and the Agency for International Development. Recently the Hewlett Foundation has provided a grant to the Center for the support of foreign students, and a grant from the Mellon Foundation provides extended post-doctoral research experience for those with recently awarded Ph.D.'s. Additional funds for the support of American students are provided through an NICHD training grant.



# RESEARCH

## Research Facilities

The Center has no centrally directed research program; instead, research reflects the interests of the professional staff and doctoral candidates. Our purpose is to provide facilities and services which enable individuals to work effectively on the problems of their own choosing. To this end, the Center has expanded its data processing section and the reference collection.

The data processing facilities are headed by J. Michael Coble and Albert Anderson; other members of the programming and data processing staff are Fran Cartford, Amy Hsu, Jonathan Sell and Linda Rentfro. All computing work is channelled through the University of Michigan Computing Center. The Center's library of data files has grown to over 700 reels of magnetic tape.

The data processing section has four hard-copy computer terminals and four "intelligent" CRT terminals for interactive processing and analysis of data. A data station with line printer allows for the printing of larger quantities of output on-site. A portable terminal allows for the preparation of data files and programs outside the physical confines of the Center. A word processor is used for the preparation of texts and editing manuscripts and correspondence. The Center now has the capacity for interactive processing of data sets containing hundreds of thousands of case records. A remote data concentrator allows connection of Center terminals to the Michigan Computing Center over a single high-speed line, thus avoiding delays that normally occur through telephone connections. Much of this equipment has been acquired through a grant from the National Science Foundation.

The reference collection at the Center has developed in response to the data and research needs of individual staff members rather than attempting to cover the entire area of population studies. At present it consists of over 5,800 volumes plus journals, United Nations publications, selected reprints and foreign materials. Over half of the collection consists of volumes from the U.S. decennial censuses of 1900 to 1980. Susan Van Eck serves as librarian with half-time assistance from Kathleen Duke. During the past year they have cataloged most of the previously uncataloged items, and now are engaged in developing a subject classification system to represent this specialized collection. Preliminary work is underway, in collaboration with the data processing section, to facilitate computerized production of catalog cards.

## Current Research

In addition to presenting abstracts of current research by PSC staff members, each year we select a single area of research to discuss in greater detail. Past annual reports have featured articles on Taiwan Fertility Research and on Patterns of Racial Inequality and Segregation.

## Demographic Dynamics of the Past

Most of us, looking back a few generations in our genealogies, would find first large families, then progressively smaller ones as we get closer to the present. Seen from the perspective of an entire society, this transformation was characterized by a drastic reduction in both birth and death rates: less children were born, but unlike the case in earlier years, nearly all survived to adulthood. This shift from high to low fertility and from high to low mortality is called the *demographic transition*. It is difficult to imagine a social change of greater importance in terms of its implications for how we live. Today's world and lifestyles are simply incompatible with the high fertility and high mortality of the past.

During the last two decades, historical demography has emerged from virtual obscurity to become a well recognized subdiscipline within the field of demographic research. It combines sleuthing talents worthy of Sherlock Holmes with a whole range of research techniques, some conventional to demography as a whole, others especially developed to suit the unusual data often used in historical demographic studies.

Professor John Knodel has long interested himself in historical demography, and particularly in the demographic transition. His recent work involves studies based on family reconstitution data. As the term implies, family reconstitution involves reconstructing the history of vital events for single families or entire villages by linking together the individual entries of births, deaths, and marriages as recorded over the centuries in the parish registers kept by the local church into the families in which they belonged. The individual family histories then provide the

micro-level data to study a whole range of demographic behavior including infant and child mortality, family building, child spacing, and family limitation.

Most demographic studies are based on conventional sources: published censuses and reports on births and deaths issued by governmental statistical bureaus. Since these sources report aggregate statistics from entire populations of pre-defined geopolitical units, they are called macro-studies. The use of micro-level data such as are produced through the family reconstitution approach makes possible more detailed documentation of demographic processes than would be possible from macro-level data alone. A case in point is Professor Knodel's study of the shift from traditional patterns of essentially natural fertility to modern reproductive patterns characterized by deliberate family limitation. Only with data on the reproductive histories of individual couples over an extended time span is it possible to trace the onset and spread of family limitation in a conclusive fashion. For example, by calculating the age at which women bore their last child, it is possible to identify when couples began to deliberately terminate childbearing prior to the biological end of the childbearing span. Studying the decline in the age of mother at last birth thus is a way to investigate the spread of family limitation in a population.

Fourteen pre-transition German villages provide the data used by Dr. Knodel. These data come from village genealogies, called *Ortsippenbücher*, a source unique to Germany. The *Ortsippenbücher* (OSB's) themselves have been painstakingly compiled by German village genealogists from contemporaneous parish and civil registers of births, marriages, and deaths. Data transcription and family linking is nearly flawless in most OSB's, as a careful sample check showed. The quality of the data is therefore excellent -- generally more accurate and complete than modern data from natural fertility populations, most of which come from Third World countries.

Some rather surprising conclusions have resulted from Professor Knodel's research using these data, notably new viewpoints on the social and biological processes underlying the demographic transition.

The traditional theory of transition, based largely on macro-studies of the late 19th and early 20th century experience in Western Europe, holds that fertility decline follows only after a decline in mortality, especially of infants and children, and only as a result of this decline coupled with socio-economic improvements brought about by modernization.

Contrary to this traditional interpretation from macro-data, Professor Knodel has documented micro-level changes in reproductive patterns beginning in the 19th century in villages where by usual standards, socioeconomic levels would be judged to be quite low. He finds substantial diversity in the timing of these changes between villages, even those in the same region. In some villages, family limitation began as early as the turn of the 19th century; in others, as late as the end of the 19th century. "Where it emerged early, the practice appears to increase almost irreversibly across successive marriage cohorts." Results indicate that early onset of family limitation was not prompted by improvements in infant and child mortality rates: quite the reverse, in fact, since the early-onset

populations had very high mortality rates which did not decline until well after family limitation behavior was established. Preferences for sex of children had at most a weak influence on demographic behavior, and birth spacing was less important than family size limitation during the early stages of transition.

Recent work with Chris Wilson, currently associated with the London School of Economics, suggests that biologically linked changes in fertility were also taking place in the German village populations during the 18th and 19th centuries. A trend towards earlier conception following marriage may reflect improved chances of conception during a women's monthly cycle, or, as demographers refer to it, improved fecundability. Moreover, the data suggest that the period during which a woman was not susceptible to pregnancy following a recent birth declined, perhaps because of a shortening in the period of breastfeeding. Also the marked seasonality of conceptions evident at the end of the 18th century almost disappeared by the end of the 19th century, perhaps reflecting a weakening of the link between nutritional levels, harvest time and conception. Thus the spread of family limitation practice during the 19th century accompanied and had to counteract an improved biological capacity for childbearing among women. While only very speculative explanations for many of these changes can be offered at present, there can be no doubt that the work of historical demographers has raised many intriguing questions for social historians to pursue for some time to come.

With his colleague Etienne van de Walle, at the University of Pennsylvania, Dr. Knodel believes strongly in the contribution of historical studies to our better understanding of the present. Studies from data such as that of the German villages can have a valuable impact on our understanding of modern-day demographic trends in Third World countries. Professors Knodel and van de Walle, using studies from historical demography, cast doubt on the theory that birth control was widely practiced in preindustrial societies, suggesting that the modern form of parity-dependent family limitation represented innovative behavior. Their results also tend to contradict previous interpretations of the fertility transition as purely an adjustment process to socio-economic development -- interpretations which some demographers have used to argue that direct intervention through the establishment of family planning programs in developing countries today will have little effect beyond that derived from more general development efforts.

A partial bibliography of John Knodel's recent work in historical demography and on the demographic transition follows:

"The Influence of Child Mortality on Fertility in European Populations in the Past: Results from Individual Data." Chapter 2 in *The Effects of Infant and Child Mortality on Fertility*, edited by Samuel H. Preston. New York: Academic Press, 1978.

"Natural Fertility in Preindustrial Germany." *Population Studies* 32(3): 481-510, November 1978.

(with Etienne van de Walle) "Lessons from the Past: Policy Implications of Historical Fertility Studies." *Population and Development Review* 5(2): 217-245, June 1979.

"An Exercise on Household Composition for Use in Courses in Historical Demography." *Local Population Studies*, No. 23: 10-23, Autumn 1979.

"From Natural Fertility to Family Limitation: The Onset of Fertility Transition in a Sample of German Villages." *Demography* 16(4): 493-521, November 1979.

"Demographic Transitions in German Villages." Paper presented at the Summary Conference on European Fertility, Princeton, N.J., July 1979. (to be published in a volume based on the conference proceedings, edited by A.J. Coale).

(with Susan De Vos) "Preferences for the Sex of Offspring and Demographic Behavior in 18th and 19th Century Germany: An Examination of Evidence from Village Genealogies." *Journal of Family History* 5(2): 145-146, Summer 1980.

(with E. Van de Walle) "Europe's Fertility Transition: New Evidence and Lessons for Today's Developing World." *Population Bulletin* 34(6), February 1980.

"The Influence of Child Mortality on Fertility in a Natural Fertility Setting: An Analysis of Individual Level Data for Selected German Villages," in *Natural Fertility: Concepts, Evidences, Implications, and Theory*, edited by Henri Leridon and Jane Menken, Liège, Ordina Editions, 1980.

"Remarriage and Marital Fertility in 18th and 19th Century Germany: An Exploratory Analysis Based on German Village Genealogies," in *Marriage and Remarriage in Past Populations*, edited by J. Dupâquier, et al., New York, Academic Press, 1981.

"Birth Spacing and Family Limitation: A Critique of the Dupâquier-Lachiver Technique for Detecting Birth Control from Family Reconstitution Data." *Annales Économies Sociétés Civilisations*, May/June 1981.

(with Chris Wilson) "The Secular Increase in Fecundity in German Village Populations: An Analysis of Reproductive Histories of Couples Married 1750-1899." *Population Studies* 35(1): 53-84, March 1981.

"Child Mortality and Reproductive Behavior in German Village Populations in the Past: A Micro-Level Analysis of the Replacement Effect." PSC Research Report No. 81-1, Population Studies Center, University of Michigan, 1981.

## Abstracts of Current Research

The research at the Center reflects, in the main, the current interests of the staff, and as such is difficult to subsume under a few headings. Nevertheless, much of the research may be seen to fall under seven categories. Fertility, Population Mobility and Clustering, and Methodology have characterized much of the Center's activity; in recent years it has become useful to specify and extend this classification to include: Historical Demography, Economic-Demographic Interactions, Marriage and Family Structure, and Social-Demographic Interactions.

The first category includes studies of the social and economic consequences and causes of fertility levels and changes, and incorporates studies of attitudes and values related to fertility. Research on fertility and family planning has been carried out for a number of developing countries as well as for the United States. Increasing attention has been paid to changing nuptiality patterns which influence fertility levels, and studies with this focus will be found under Marriage and Family Structure. Other fertility studies with an historical-demographic focus are included with that category. Many fertility studies emphasize the role of income, assets, or other economic variables. These, along with studies of other economic-demographic relationships, appear under Economic-Demographic Interactions. Similarly, studies which focus on the interrelations between social characteristics and demographic variables other than fertility are included under the Social-Demographic Interactions category.

The second area of research, Population Mobility and Clustering, includes studies of socioeconomic, racial and ethnic patterns of residential location and school composition, as well as the relation of attitudes and behavior to location.

A portion of the research at the Center is of necessity methodological, as the staff seeks to refine existing techniques or develop new tools in pursuing a given substantive problem. Current methodological research that does not clearly fit into any of the other six substantive areas is shown here.

The remaining part of this section is a collection of abstracts describing basic research underway at the Center during 1980-1981, and a list by author of the staff publications for the same period.

## FERTILITY

### *Germany: Family Composition Preferences*

The level and social correlates of fertility preferences in the Republic of Germany are being studied by Lolagene C. Coombs in cooperation with Professor H. Feger of the Departments of Psychology at the Universities at Aachen and Hamburg. The study is based on data collected in 1979 from a nation-wide sample of men and women, by the Zentrum für Umfragen, Methoden und Analysen of Munich. Tape preparation and complex variable construction has been carried out by Janice Johnson. Early findings indicate extreme preferences for very small families on the part of both married males and females, particularly among those with low income. Preference for sons is still strong among males, but females are as likely to prefer daughter as sons.

### *Mexico and the United States: Comparative Fertility Analysis*

Professor David Goldberg, who functioned as director of the University of Michigan's Detroit Area Study through the end of 1980, continued his research on comparative fertility patterns with emphasis on the relative importance of work and non-work sex roles as predictors. A



monograph on Mexican fertility involving comparison of Mexico City data, Mexican village data, and Detroit Mexican American data was submitted to the Senate Investigating Committee on Immigration and Refugee Policy (*Fertility Values and Behavior: Mexican Populations*). Assistance on this project involved several PSC trainees: Allan Beck, Nancy Grassmick, Kathy London and Herb Smith.

#### *Taiwan: The Changing Family Network and Fertility*

This research is a collaborative project among three Population Studies Center staff members (Ronald Freedman, Lolagene C. Coombs, and Deborah Freedman) a group of Taiwan investigators (T.H. Sun, M.C. Chang, P.K.C. Liu, C.H. Chang, J.C. Hsieh, Y.C. Chuang, and A.C.C. Yin) and Bernard Gallin, a social anthropologist from Michigan State University.

The principal objective of the study is to analyze how the changing mixture of traditional and modern elements in the family are related to reproductive variables in a developing society (Taiwan). It has combined social survey work and community studies by anthropologists. In the first phase of the study an island-wide sample of married women of childbearing age were interviewed about selected aspects of family and household structure and interaction and a detailed reproductive history. The same survey instrument was used to interview all eligible respondents in four local populations, which were also studied in independent interviews by the anthropologists. This first stage of the field work was completed in 1980-1981. A computer tape has been prepared with all of the basic first-round survey data for the island-wide sample and for the villages. In addition, the anthropologists' materials were coded and placed on the same computer tape.

Reinterviews will be taken in the fall of 1981 with 200 families selected from the island-wide sample and with all eligible respondents in two of the villages studied by anthropologists. In these visits there will be separate interviews with the original respondent wife, her husband, and her mother-in-law. The subject will be the network of social and economic and religious bonds which link members of the nuclear unit to a larger kinship matrix and how this matrix is related to reproductive variables. The insights gained from the first survey and the anthropological work will be taken into account in these interviews. During the spring of 1981 Ronald Freedman, Lolagene Coombs, and Deborah Freedman were in Taiwan to work with Chinese colleagues on a pretest of these reinterviews. The questionnaires will be pretested again prior to field work beginning in October. David Gurk, T.Y. Ting, and I.K. Kim have assisted in various phases of this study. This project is currently being funded by the National Institute of Child Health and Human Development, and preliminary work was supported by The Population Council, the Rockefeller Foundation, and the Ford Foundation.

#### *Taiwan: The Impact of Changing Familial Roles, Values and Activities on Reproductive Behavior*

Using data from large, island-wide samples of married women in the childbearing years in Taiwan in 1973 and 1980, Lolagene C. Coombs is investigating the relationship

of husband-wife roles, familial and religious values and activities of wives outside the home to reproductive preferences, timing of use of contraception and achieved fertility. Comparable scales for the 1973 and 1980 data have been constructed to measure the degree of modernization in such domains as husband-wife role attitudes, childrens' responsibilities to parents, importance of a male heir, familial-religious values and practices, marriage arrangements, wife's activities (including work) outside the home, and media exposure, among others. Preliminary findings indicate a strong positive monotonic relationship between modernization in these attitudes and practices and preferences for smaller families. While preferences have decreased since 1973 among wives with traditional as well as modern life orientations, more modern attitudes are conducive to lower preferences for number of children. Ik-Ki Kim has been a student assistant in this work, along with Janice Johnson.

#### *Thailand: Analysis of Determinants of Fertility Levels and Trends in Thailand*

John Knodel is continuing his collaborative research with colleagues from the Institute of Population Studies of Chulalongkorn University and from the Institute of Population and Social Research of Mahidol University in Bangkok. The current aim of the project is a comprehensive survey of determinants and associated factors affecting Thai fertility; this research is based on both a reanalysis of a variety of surveys taken over the last decade and collation of results from existing studies. Center student Napaporn Chayovan, who is also a member of the Institute of Population Studies in Bangkok, is helping in this research, which is funded by the National Academy of Sciences Committee on Population and Demography.

#### *United States: Timing of Marriage and its Effect on Fertility*

For purposes of policy concerning fertility reduction, Lee Edlefsen is attempting to obtain an estimate of the amount of reduction in fertility which accompanies increases in age at marriage. This raises methodology issues related to the estimation of causal effects. That is, the observed relationship between age at marriage and fertility reflects self-selection as well as causality. His objective is to separate the two types of effects.

#### *United States: Longitudinal Study of Correlates of Fertility*

This year marked the final phase of the study of the Detroit longitudinal sample of women under a four-year grant from NICHD. Three analyses were completed by Deborah Freedman during this past year:

(a) A study of the correlates of having an early first birth. This analysis used a wide range of measures of sex role orientation to see if the observed higher fertility of women who were young at their first birth was related to their stronger preferences for home roles. Although women with an early birth did hold more traditional sex role attitudes, they were not traditional in their family size goals nor did home-oriented attitudes or behavior explain

the observed fertility age-at-first-birth relationship. Thus differentials in sex role orientation seem unlikely to account for the higher fertility of women with an early first birth. Center students Lynn Wallisch and Sara Millman assisted with this analysis.

(b) A study of the relationship between income and fertility behavior. This study capitalized on the longitudinal nature of the Detroit data, by studying whether changes in income over the 15 year period were related to additional births during that time. Even controlling for initial income expectations, income improvement did not show a consistent positive association with additional children. Keiichiro Matsushita was a student assistant in this work.

(c) Completion of an analysis on changes in fertility expectations and preferences over the 15 year survey period.

#### *Cross Cultural: Comparative Analysis of World Fertility Survey (WFS) Data*

This analysis employs a multi-level approach to separate micro- and macro-mechanisms responsible for varying fertility patterns across social groups, within and between societies. At present, it is based on World Fertility Survey data from about 20 countries. The number of countries included will expand as more WFS standard recode tapes become available. The investigation involves the full collaboration of Barbara Entwisle, Albert Hermalin and William Mason. Thus far, the investigators have devised a micro-specification of fertility behavior suitable for these data which distinguishes three components of the fertility process—onset, early fertility, and later fertility. It links these fertility outcomes and their determinants together in a block-recursive model, focusing on cohorts for comparative purposes. The model involves both socioeconomic variables such as wife's education and intermediate variables such as contraceptive use patterns. Data analysis is in a preliminary stage, with student trainee Joan Kahn assisting. Thus far the work has been supported under a contract from the National Academy of Sciences Panel on the Determinants of Fertility; an extended analysis of this topic has been approved by NICHD and will be funded over the next year and a half.

#### *Cross-Cultural: Work, Sex Roles and Differential Fertility*

Additional work by David Goldberg on comparative fertility analysis was facilitated by a grant from the National Academy of Sciences. The Value of Children (VOC) data sets from nine countries are being analyzed to determine, first, the relative contribution of work and non-work sex roles to differential fertility and second, the impact of localized norms (measured through the use of population potentials) on fertility behavior. Baron Moots is sharing the VOC analysis effort.

## **POPULATION MOBILITY AND CLUSTERING**

#### *Europe: Suburbanization and Deconcentration in Large Urban Agglomerations*

During his 1980-81 stay at the International Institute for

Applied Systems Analysis (IIASA), in Laxenburg, Austria, William H. Frey coordinated data collection with foreign scholars and statistical bureaus for a European companion study to his investigation of redistribution in large U.S. SMSAs. Still in its initial stages, this study will focus on core-periphery suburbanization and deconcentration in European urban agglomerations with populations greater than one million, paying particular attention to the 1960-1980 period. This focus will permit comparisons to the parallel deconcentration experiences of large U.S. metropolitan areas during this period. Because official urban agglomeration definitions vary widely across the countries involved, the study will employ the functional urban region concept developed in earlier studies undertaken at IIASA and by geographer Peter Hall at the University of Reading, England. The migration data are being obtained directly from census and population register files available from the statistical bureaus of the respective nations.

#### *Hungary: Historical Changes in Social Mobility*

Professor Albert Simkus' work on changes in Hungarian social mobility is directed at describing the ways in which a regime of social mobility can be transformed through the processes of economic development and radical political change. These analyses involve fitting models of change to retrospective survey data on labor force life-histories. The topics being studied include inter- and intragenerational occupational mobility, assortative marriage, changes in labor force structure, and women's labor force participation. Center trainee Lynn Kincaid has been providing research assistance for this project and is involved in her own work on changes in women's social mobility.

#### *United States: Migration and Locational Choices of the Retired Population*

Lee Edlefsen is currently preparing a research proposal to examine determinants of the migration of the retired population, using household level time series data from the Panel Survey of Income Dynamics and the Annual Housing Survey to develop an econometric model of households' decision to move, and then of choice of destination and housing type.

#### *United States: Racial Segregation in the Public Schools*

Professor Reynolds Farley has continued his research on racial segregation in public schools of major metropolitan areas in the U.S., with funding from the National Institute of Education. In this connection, he has acted as a consultant for the Chicago Public Schools, taught an undergraduate level course titled "Racial and Cultural Contacts" and is presently working on a compendium of statistical trends in public school segregation, to appear late in 1981.

#### *United States: Analyses of Residential Segregation*

Professor Albert Simkus' research on residential segregation involves developing segregation indices appropriate for utilizing cluster-based sample survey data in measuring residential segregation. Professor Simkus is

developing proposals for support for this methodological work and for a study of changes in socio-economic residential segregation in the United States between 1940 and 1980.

#### *United States: Socioeconomic Differences Based on Race*

Partially funded by the Social Science Research Council, Reynolds Farley has spent the last year looking at racial differences in social and economic status from 1960 to the present. Such factors as education, earnings, family welfare and school enrollment have been scrutinized for their effect on socioeconomic status of blacks and whites. He was assisted by Patricia Gwartney-Gibbs and Patsy Taylor in an investigation on sex and racial differences in earnings and by Daphne Spain and Suzanne Bianchi in examining racial differences in housing. The remainder of funds for this ongoing project was provided by the National Institute of Education. A Social Science Research Council Monograph titled *Racial Change in the United States: A Description of Social and Economic Indicators* is scheduled for fall publication.

#### *United States: Migration and Redistribution in Large SMSAs*

William H. Frey brings to the Population Studies Center his ongoing metropolitan migration study, funded by the Center for Population Research, NICHD. The study compares the residential mobility and migration dynamics of city-suburban redistribution and population deconcentration across the 65 largest U.S. SMSAs. It employs migration stream data from the U.S. Census, Current Population Survey and Annual Housing Survey to: examine cross-sectional and longitudinal changes in the city-suburb redistribution patterns of population subgroups; determine how these are influenced by demographic structural and policy-alterable community attributes; and make projections of future city and metropolitan populations using a multistate cohort component methodology that incorporates both residential mobility and migration streams. In addition, the following specific topics are to be investigated: the interactions between employment suburbanization and the selective city-suburb redistribution of worker-residents (with Franklin D. Wilson, University of Wisconsin, Madison); the relationships between changing household composition, life-cycle mobility patterns and central city household populations (with Frances E. Kobrin, Brown University); and the consequences of continued metropolitan-nonmetropolitan migration for the populations of large, industrial SMSAs.

#### *Cross-Cultural: Migration and Fertility*

Professor Lee Edlefsen is developing a proposal to investigate the effects of rural-urban migration on fertility of the migrants in three developing countries, using existing data from the World Fertility Survey or from government statistical bureaus of the countries involved. The proposal is being submitted to the Agency for International Development.

#### *Cross-Cultural: Comparisons of Social Mobility*

Albert Simkus' studies of comparative social mobility include two- and three-country comparisons among Austria, Hungary, Poland, and the United States, with regard to intergenerational occupational mobility, assortative marriage, and equality of access to education. This research is being supported by a Rackham Faculty Research Grant from the University of Michigan.

## **ECONOMIC-DEMOGRAPHIC INTERACTIONS**

#### *Bangladesh: Economic and Demographic Impact of the Comilla Project*

This research is part of a joint program by the Population Studies Center and the Center for Research on Economic Development. The purpose of this endeavor is to develop a series of case studies which can be used as models by development planners who want to assess the demographic impact of specific development projects. The Comilla case study deals with an integrated rural development project which resulted over a period of 15-20 years in increases in rice production (the major crop in the area) far exceeding those achieved in other rural areas of Bangladesh. Methodologically, the study illustrates how demographic consequences may be assessed in a situation where relevant data are sparse and their reliability uncertain. The assumption is that the *relation* between economic change and demographic change in the project area may be inferred from that observed in other rural areas in Bangladesh where household surveys have been conducted. Under such circumstances one can at best predict the direction and order of magnitude of demographic changes. Substantively, it appears that the Comilla Project may have reduced population growth in the project area to a small extent, and that this reduction resulted not from the economic changes but from the informal educational programs associated with the project. This research program has been financed by the University of Michigan, with Professor Eva Mueller as the principal investigator from the Center. Student assistance was provided by Julie Anderson, now at Yale.

#### *Colombia: Female Status, Socio-Demographic Context and Fertility in Colombia*

With colleagues Michael Conroy and Frank Bean of the University of Texas and Alberto Hernandez, Paul Richardson's research this year was directed toward two fundamental questions which, in fact, transcend the artificial dichotomy between socioeconomic determinants of fertility and the effects of public family-planning expenditures. To what extent, first, are age-specific fertility rates in Colombia a function of female educational attainment, labor force participation, and wage levels? Second, to what extent does variation in recent availability of family-planning services explain variation across regions in fertility levels, controlling for educational attainment, labor force participation, migration patterns, nuptiality, and income levels? The study found that higher levels of the ma-

for dimensions of female status (education, labor force participation, income, and freedom from unemployment) were strongly and consistently related to low levels of fertility. The Agency for International Development provided support.

#### *Malaysia: Female Employment and Fertility*

Professor Karen Mason completed a paper for the National Academy of Sciences on fertility norms, and continued her work on female employment and fertility in Malaysia. Relying upon ethnographic sources as well as statistical data from the World Fertility Survey, her results suggest a need to broaden prevailing ideas about the employment-fertility relationship. The general structure of social and economic opportunities — not just the so-called compatibility of the worker and maternal roles — appears to shape the employment-fertility relationship in Peninsular Malaysia. She is currently designing a new project on household structure and demographic events in historical and comparative perspective.

#### *United States: Economic Determinants of Numbers, Timing and Spacing of Births*

Using data from the National Longitudinal Survey of Adult Women, Professor Lee Edlefsen is looking at the effect of changes in the opportunity cost of time on the timing of first birth and on total length of the childbearing interval, as well as on completed fertility.

#### *Cross Cultural: Income and Wealth as They Affect the Demand for Children in Developing Countries*

The relation between income, income distribution, and the demand for children has played a central role in the demographic transition literature. However, empirical studies in developing countries have shown quite inconsistent findings regarding the direction and magnitude of this relation. Professor Eva Mueller, assisted by Center trainee Kathy Short, is attempting to assess the "state of the art" in this area of research. Pertinent theories are reviewed and empirical studies are summarized in an attempt to explain conflicting findings and identify promising directions for future research. A paper was prepared for the Panel on Fertility Determinants, National Academy of Sciences.

#### *Cross-Cultural: State-Sponsored Pension Programs and Fertility Levels in LDC's*

The desire for old age support is thought to be one important motive for large family sizes in less developed countries. If so, then old age assistance provided by the state would encourage smaller family sizes. Barbara Entwisle uses cross-national data from secondary sources to test the hypothesized inverse relationship between pension support and fertility levels. Her results are contained in two papers, available as PSC Research Reports #81-8 and #81-9. The first, written with the collaboration of Kenneth A. Bollen, examines measurement issues, specification of lagged relationships, regional differences, and fertility change (as well as levels). The findings support the pension-fertility hypothesis. The second paper, written with the collaboration of C.R. Winegarden, further ex-

plores the pension-fertility relationship and finds that lower fertility levels promote greater pension expenditure as well as vice versa. This paper also suggests that life expectancy, the old age dependency ratio and fertility levels represent important demographic determinants of pension expenditure. Entwisle and Winegarden are exploring further extensions of these ideas.

## METHODOLOGY

#### *United States: Model Migration Schedules for Intra-metropolitan Residential Mobility*

William H. Frey is presently collaborating with Andrei Rogers and Luis Castro of the International Institute for Applied Systems Analysis, Laxenburg, Austria in the construction of model migration schedules that pertain to residential mobility within U.S. metropolitan areas. Model migration schedules, as developed by Rogers and Castro, provide a means of summarizing the profile of a population's age-specific migration rates in terms of a few parameters that represent key life-cycle mobility dimensions. However, previous research by the latter authors has been confined to the analysis of migration between political divisions, rural-urban migration or other forms of inter-labor market migration. The present collaboration will focus on constructing model migration schedules for intra-labor market residential mobility based on age specific migration data for individual U.S. metropolitan areas, specially prepared by the Census Bureau. This investigation will contrast the parameters for these schedules with those associated with inter-labor market migration, will contrast the schedules for blacks with those of whites, and will examine the sources of variability in these parameters across metropolitan areas. This research has been partially supported by the Center for Population Research of the National Institute of Child Health and Human Development (NICHD) to August of 1982.

#### *Cross-Cultural: Methodological Issues in the Analysis of Individual-Level and Aggregate Demographic Data*

Professor Lee Edlefsen is investigating the conceptual and statistical problems which arise in using aggregate demographic data as opposed to individual-level data, particularly as applied to developing countries.

#### *Cross-Cultural: Analysis of Cross-National Fertility Studies*

More than twenty-five cross-national fertility studies have been published to date. Due to differences in the variables included, the sample of national populations analyzed, and the specification of the model that is estimated, differences in the results of these studies cannot be interpreted in a meaningful way. Barbara Entwisle is analyzing the empirical effects of these methodological differences. Two papers have been written so far (available as PSC Research Reports #81-6 and 81-7). The first examines whether choice of one fertility measure (as opposed to another) leads to systematic differences in results obtained. Results based on the crude birth rate and the total fertility

rate suggest that cross-study differences in choice of measure do not account for discrepancies in findings. The second paper, written with the collaboration of Kenneth A. Bollen, examines the specification of the development-fertility relationship. The analysis indicates that the relationship is curvilinear and suggests that the more usual linear specification, in combination with differences in sample composition, could account for discrepancies in results. Further work along these lines includes a statistical review of the cross-national fertility literature, more detailed analysis of sample composition, and an examination of regional differences in macro-level fertility determinants.

## MARRIAGE AND FAMILY STRUCTURE

### *Taiwan: Family Size and Educational Expectations*

Albert Hermalin has been continuing analysis of parental expectations concerning children's educational attainment. This is part of a larger two generational study of the relation of education to family structural characteristics. The current analysis focuses on differences in parental expectations for sons' and daughters' education. The results indicate that on the average, families expect their sons to achieve more education than daughters. The sex difference is greater among certain ethnic groups, the less educated and rural, and those who expect greater economic benefit from children. It is also related to the size and sex composition of the family. Paul Cheung has been assisting with this project.

### *United States: Remarriage Among U.S. Women*

During the past year Barbara Entwisle began work on an analysis of remarriage based on two rounds of the National Survey of Family Growth (1973 and 1976). The first part of this project employs model marriage schedules in a descriptive analysis of socioeconomic differentials in the pace of remarriage and the probability of remarriage. This analysis is not yet complete. Future efforts will consider the effect of children on remarriage and race differences in the stability of second marriages. This research is being carried out with the collaboration of William Grady. Gloria Jones has provided some assistance.

### *United States: Detroit Family Growth Study*

A new survey in 1980 by Deborah Freedman and colleagues from the Institute for Social Research of the University of Michigan interviewed the 18 year old children of the Detroit Longitudinal Study of Correlates of Fertility sample (the original birth sample), reinterviewing the mothers at the same time. This project focuses on intergenerational effects, looking at the effects of the parental family on the attitudes and behavior of their adolescent children with regard to divorce and marriage, sex role attitudes, educational and occupational aspirations and behavior, fertility plans, adolescent sexuality and child-parent relations. The 15 year data set for the parental family, together with the 1980 interviews with the mothers and

their young adult children, provide a unique resource for study. A methodological paper has analyzed the techniques which contributed to the unusually high response rates achieved in this study. A preliminary analysis contrasted the attitudes of mothers and daughters with regard to appropriate roles for women. There has been considerable media response to these initial findings, with subsequent radio appearances and articles in many newspapers. Plans for presenting the results of this study include not only scientific papers, but also a book which would present these findings to a broader audience. Center students Lowell Taylor and Keiichiro Matsushita assisted in the work.

## HISTORICAL DEMOGRAPHY

### *Germany: Village Population Dynamics in Germany*

John Knodel is analyzing extensive family reconstitution data which he developed from village genealogies for 14 German villages covering a period from the 17th century to the early 20th century. The principal analyses revolve around the following topics: natural fertility and family limitation; remarriage and fertility; patterns of birth spacing during the demographic transition; changes in fecundity; and child mortality and its interrelationship with fertility. The data are particularly valuable because they are on the micro-level, cover a long span of time including the period prior to the demographic transition as well as the initial period of the secular fertility decline, and represent areas with a substantial range of various demographic characteristics. The results of the analyses are potentially useful not only for increasing our understanding of demographic behavior in the past, but also for shedding light on demographic processes in pre-industrial settings in general. The data will be used for making comparisons with results emerging for contemporary less-developed countries. David Gurk provided some assistance in this project, which was funded by a grant from the National Institutes of Health.

## SOCIAL-DEMOGRAPHIC INTERACTIONS

### *United States: Trends in Political Alienation in the U.S.*

Together with Professor James House of the University of Michigan Department of Sociology and Survey Research Center, William Mason is continuing his research on national trends in political alienation, with the ultimate goal of constructing a social indicator model of alienation. This research extends, expands and redefines conclusions reported by Mason and House in "Political Alienation in America, 1952-1968," *American Sociological Review* 40(2): 123-147, April 1975. The major paper of the current project thus far is "Dimensions of Political Alienation in America: Theoretical and Empirical," by Mason, House and Martin, available as PSC Research Report No. 81-11.

## Publications

This listing includes papers written by members of the Center staff (as authors or co-authors) which have been published or accepted for publication since the Center's last annual report, Winter 1981. Publications of student apprentices are listed in the Training section.

In the spring of 1981, the Center inaugurated a Research Reports series, to facilitate early dissemination of research results. Listings of the Research Reports, Center reprint series and other available publications by the staff were circulated at that time over 500 individuals, libraries, and agencies working in the population field or indicating an interest in demographic research and requesting inclusion on the Center's mailing list. Approximately 2700 publications were mailed out in the last academic year in response to some 250 requests from people in the United States and in 38 foreign countries. In addition to requests for publications from the list, the Center staff answered many questions about research materials that may be useful to researchers in the United States and other countries.

### Lolagene C. Coombs

"Economic Factors in Fertility Decisions: The Role of Costs and Benefits," *Academia Economic Papers* 9(1): 89-122, March 1981.

(with T.H. Sun) "Familial Values in a Developing Society: A Decade of Change in Taiwan," *Social Forces* 59(4): 1229-1255, Summer 1981.

(with M.C. Chang) "Do Husbands and Wives Agree? Fertility Attitudes and Later Behavior," *Population and Environment* 4(2), Summer 1981.

### Lee F. Edlefsen

"An Investigation of the Timing Pattern of Childbearing," *Population Studies* 35(3), November 1981.

"The Effects of Sample Truncation on Estimates of Fertility Relationships," *Research in Population Economics*, Vol. 3, Greenwood, Conn.: JAI Press, forthcoming.

"The Comparative Statics of Hedonic Price Functions and Other Non-Linear Constraints," *Econometrica*, November 1981.

(with S.S. Lieberman) "The Use of Aggregate Data in Economic-Demographic Analysis," *Research and Policy Issues in the Analysis of Fertility Behavior in Developing Countries*, edited by G. Simmons and G.M. Farooq, forthcoming.

### Barbara Entwisle

"Crude Rates in Cross-National Fertility Research," Research Report No. 81-6, Population Studies Center, University of Michigan, 1981.

(Kenneth Bollen and Barbara Entwisle) "Economic Development and Fertility: A Curvilinear Specification," Research Report No. 81-7, Population Studies Center, University of Michigan, 1981.

(with Kenneth Bollen) "Pension Programs: An Indirect Means to Fertility Reduction," Research Report No. 81-8, Population Studies Center, University of Michigan, 1981.

(with C.R. Winegarden) "Fertility and Pension Interrelationships in Developing Countries: Econometric Evidence," Research Report No. 81-9, Population Studies Center, University of Michigan, 1981.

"TFR Versus CBR in Cross-National Fertility Research," *Demography* 18(4), November 1981.

### Reynolds Farley

(with Diane Colasanto) "Racial Residential Segregation: Is it Caused by Misinformation About Housing Costs?" *Social Science Quarterly* 61(3/4): 623-637, December 1980.

"The White Flight Controversy: Policy Implications," *Research in Sociology of Education and Socialization*, Vol. 3, Greenwood, Conn.: JAI Press, 1981.

(with Suzanne M. Bianchi and Daphne Spain) "Racial Inequalities in Housing: An Examination of Recent Trends," *Demography*, forthcoming.

(Patricia Taylor, Patricia A. Gwartney-Gibbs and Reynolds Farley) "The Changing Structure of Earnings Inequality, 1960-1978," submitted for publication.

### Deborah Freedman

(with Arland Thornton and Donald Camburn) "Maintaining Response Rates in Longitudinal Studies," *Sociological Methods and Research* 9(1): 87-98, August 1980.

(Ronald Freedman, Deborah S. Freedman and Arland D. Thornton) "Changes in Fertility Expectations and Preferences Between 1962 and 1977: Their Relation to Final Parity," *Demography* 17(4): 365-378, November 1980.

### Ronald Freedman

(with Deborah S. Freedman and Arland D. Thornton) "Changes in Fertility Expectations Between 1962 and 1977: Their Relation to Final Parity," *Demography* 17(4): 365-378, November 1980.

(with Siew-Ean Khoo and Bondan Supraptilah) "Use of Modern Contraceptives in Indonesia: A Challenge to the Conventional Wisdom," *International Family Planning Perspectives* 7(1): 3-15, March 1981.

(with Ming-Cheng Chang and Te-Hsiung Sun) "Trends in Fertility, Family Size Preferences, and Family Planning Practice: Taiwan, 1961-80," *Studies in Family Planning* 12(5): 211-228, May 1981.

(with Siew-Ean Khoo and Bondan Supraptilah) "Modern Contraceptive Use in Indonesia: A Challenge to Conventional Wisdom," World Fertility Survey (London), *Scientific Report* No. 20, in press.

(with John Casterline) "Nuptiality and Fertility in Taiwan," in *Nuptiality and Fertility: Proceedings of the IUSSP Seminar held in Bruges, January 1979*, Liege, Belgium: Ordina Editions, in press.

**William H. Frey**

(with Larry H. Long) "Migration and Settlement: The United States," International Institute for Applied Systems Analysis Research Report, Laxenburg, Austria: IIASA, forthcoming.

**David Goldberg**

"The Continuing Growth of Non-Metropolitan Areas in Michigan," Lansing, Mich.: Upper Great Lakes Regional Commission, 1980.

**Albert Hermalin**

(with William Mason) "A Strategy for Comparative Analysis of WFS Data, with Illustrative Examples," in *The United Nations Programme for Comparative Analysis of World Fertility Survey Data*, UNFPA, 1980, pp. 90-168.

(with J. Forrest and S. Henshaw) "The Impact of Family Planning Clinics on Adolescent Pregnancy," *Family Planning Perspectives* 13(3): 109-116, May-June 1981.

"Issues in the Comparative Analysis of Techniques for Evaluating Family Planning Programmes," United Nations, forthcoming.

"Some Cautions in the Use and Interpretation of Regression Analysis for the Evaluation of Family Planning Programs," United Nations, forthcoming.

"Techniques for Measuring Family Planning Program Effects on Fertility," in *International Encyclopedia of Population*, The Free Press, forthcoming.

"The Role of Surveys in the Analysis of Family Planning Programmes" (editor), Liège: IUSSP/Ordina, forthcoming.

**John Knodel**

"Remarriage and Marital Fertility in 18th and 19th Century Germany: An Exploratory Analysis Based on German Village Genealogies," in *Marriage and Remarriage in Past Populations*, edited by J. Dupâquier, et al. New York: Academic Press, 1981.

"Espacement des Naissances et Planification Familiale: Une Critique de la Méthode Dupâquier-Lachiver," *Annales Économies Sociétés Civilisations*, May/June 1981. also issued in English as Research Report No. 81-5, Population Studies Center, University of Michigan, 1981.

(with Nibhon Debavalya) "Breastfeeding in Thailand: Trends and Differentials 1969-1979," *Studies in Family Planning* 11(12): 355-377, December 1980.

(with Nibhon Debavalya) "Trends and Differentials in Breastfeeding in Thailand: An Analysis of Survey Data 1969-1979," Research Paper Series of the Institute of Population Studies, Chulalongkorn University, No. 36, 1980.

(with Chris Wilson) "The Secular Increase in Fecundity in German Village Populations: An Analysis of Reproductive Histories of Couples Married 1750-1899," *Population Studies* 35(1): 53-84, March 1981.

(with Nibhon Debavalya and Peerasit Kamnuansilpa) "Thailand's Continuing Reproductive Revolution," *International Family Planning Perspectives* 6(3): 84-97, September 1980.

(with Nibhon Debavalya) "Breastfeeding Trends in Thailand and their Demographic Impact," *Intercom* 9(3): 8-10, March 1981.

"Child Mortality and Reproductive Behavior in German Village Populations in the Past: A Micro-Level Analysis of the Replacement Effect," Research Report No. 81-1, Population Studies Center, University of Michigan, 1981.

"Natural Fertility: Patterns, Levels, and Trends," in *Determinants of Fertility in Developing Countries: A Summary of Knowledge*, National Academy of Sciences, forthcoming.

"Breastfeeding: Demographic Aspects," *International Encyclopedia of Population*, The Free Press, forthcoming.

(with Etienne van de Walle) "Fertility Decline: European Transition," *International Encyclopedia of Population*, The Free Press, forthcoming.

**Karen Oppenheim Mason**

(with Susan De Vos) "Trends and Differentials in Peninsular Malaysian Fertility," Research Report No. 81-2, Population Studies Center, University of Michigan, 1981.

(with V.T. Palan) "Female Education, Fertility and Family Planning Behavior in Peninsular Malaysia," Research Report No. 81-3, Population Studies Center, University of Michigan, 1981.

(with V.T. Palan) "Female Employment and Fertility in Peninsular Malaysia: The Maternal Role Incompatibility Hypothesis Reconsidered," Research Report No. 81-4, Population Studies Center, University of Michigan, 1981. also to appear in *Demography*

"Norms Relating to the Desire for Children," in *Determinants of Fertility in Developing Countries: A Summary of Knowledge*, National Academy of Sciences, forthcoming.

**William M. Mason**

(Albert Hermalin and William Mason) "A Strategy for Comparative Analysis of WFS Data, with Illustrative Examples," in *The United Nations Programme for Comparative Analysis of World Fertility Survey Data*, UNFPA, 1980, pp. 90-168.

(with R.D. Mare) "Children's Reports of Parental Socioeconomic Status: A Multiple Group Measurement Model," *Sociological Methods and Research* 9(2): 178-198, November 1980.

reprinted in *Social Measurement: Current Issues*, edited by G.W. Bohrnstedt and E.F. Borgatta, Beverly Hills: Sage Publications, 1981.

(with James S. House and Steven S. Martin) "Dimensions of Political Alienation in America: Theoretical and Empirical," Research Report No. 81-11, Population Studies Center, University of Michigan, 1981.

(with Herbert L. Smith) "Age-Period-Cohort Analysis and the Study of Deaths from Pulmonary Tuberculosis," in *Analyzing Longitudinal Data for Age, Period and Cohort Effects*, edited by H.H. Winsborough and O.D. Duncan, New York: Academic Press, forthcoming.

**Eva Mueller**

(Sherrie Kossoudji and Eva Mueller) "The Economic and Demographic Status of Female Headed Households in Rural Botswana," Research Report No. 81-10, Population Studies Center, University of Michigan, 1981.  
also to appear in *Economic Development and Cultural Change*.

**Albert Simkus**

"Historical Changes in Occupational Inheritance under Socialism: Hungary 1930-1973," in *Research in Social Stratification and Mobility*, edited by Donald Treiman and Robert Robinson, Greenwood, Conn.: JAI Press, 1981, pp. 171-204.

"Socioeconomic Careers and Radical Social Change," in *Aging from Birth to Death, Vol. 2*, edited by Matilda White Riley, AAAS, forthcoming.

"Comparative Research on Social Stratification and Mobility," *International Journal of Comparative Sociology*, forthcoming.





# TRAINING PROGRAM

## Description

The Population Studies Center provided the opportunity for on-the job training to 31 graduate students and two post-doctoral students during the 1980-81 academic year. During the past year, six students have completed their doctoral requirements and gone on to professional work.

The Center emphasizes that it is a training and not a teaching institute. Graduate students are first admitted to either the Sociology or the Economics Department of the University of Michigan before admission to the Center. Courses, both those designed primarily for demography students and those of a more general interest, are taken under the auspices of the departments, although many of the demography courses are taught by Center staff members.

The major support for American pre-doctoral students comes from a training grant from the National Institute for Child Health and Human Development. The sociology training grant supports one post-doctoral fellow per year. The recipient of the Center's one-year sociology fellowship for 1980-81 was Paul Richardson, from the University of Texas at Austin. Foreign students are largely supported by a Center grant from the Hewlett Foundation. In addition, some students receive support from other sources, including the Ford Foundation; the Rockefeller Foundation; the U.S. Department of Labor; the Population Council; the Horace H. Rackham School of Graduate Studies, University of Michigan; the National Science Foundation; the Barbour Fellowships and the Department of Sociology, University of Michigan.

The goal of the training is to produce a student whose substantive and methodological skills will permit independent work across a broad range of changing topics in the field of population studies, and who can function effectively in both academic and non-academic settings. The basic training program focuses on mastery of the techniques and substantive research literature necessary for an understanding of the social and economic causes and consequences of population size, composition, distribution and change. Particular emphasis is given to the basic demographic processes of mortality, fertility, nuptiality

and migration which determine population structure and change.

At the core of the Center's graduate education is an apprenticeship program in which students spend 12 hours per week working at the Center under the close supervision of a member of the professional staff. The apprenticeship lasts about two and a half years and frequently involves the student in ongoing research of his or her advisor. Class work typically requires two and a half years and includes at least five of the following courses in sociology: Population Problems, Regional Population Problems, The Urban Community, Human Ecology, Research Methods in Population and Human Ecology, Advanced Population Methods, Proseminar in Historical Demography, and Seminar in Population and Human Ecology, or in economics: Economics of Population, The Economics of Population Growth, and Seminar in the Economics of Population. (For a short description of each course, see "Courses in Demography" on page 21 of this section). Other courses are taken in accord with the student's particular interests. By the third and fourth years, the student is usually ready to devote full time to the development and execution of a doctoral dissertation. During this period the student may also gain some teaching experience prior to entering the job market.

In addition, the Center offers the student a number of other formal and informal educational experiences. In a series of one-hour noncredit training sessions organized by J. Michael Coble and Albert Anderson, first year students learn basic computer techniques and are given the opportunity to familiarize themselves with the Center's library of tapes and programs and their application to problems of population analysis. This training is required of all Center students.

A part of the program in Economic Demography, supported by a National Institute of Health training grant, is carried out at the Center in cooperation with the Department of Economics. Students in economics who are interested in population issues receive demographic training through participation in the Center's apprenticeship program and through taking appropriate courses in population. The Economic Demography Seminar meets at the Center three times a month during the academic year and is attended by both economic and sociology students. It brings in distinguished outside scholars and allows

students in the Economic Demography program to present their research findings in a collegial format. In the 1980-81 academic year, this seminar was coordinated by Center students Charles Calhoun and Scott Grosse. Some students also participate in the Survey Research Center summer program, which provides training in various facets of survey research.

Students and members of the staff attend weekly "brown-bag" seminars at which a staff member, advanced student or visitor reports on current research activity. Baron Moots coordinated the seminar this year. Seminar titles included: "River Rice and Vital Rates;" "Home Terminals;" "Indonesia's Family Planning Program;" "Household Fertility, Household Composition, and Agricultural Involution in Java;" "Mexican Fertility;" "An Investigation of Timing Patterns of Childbearing;" and "Soviet Census of 1979: The Shifting Ethnic Balance."

Both staff and student offices are housed on the same floor of one building. The physical proximity allows for close and informal professional relationships between staff and students and makes for an atmosphere conducive to good work in general. Students occasionally publish with their advisors, and are also encouraged to publish their own research. Student publications are listed separately at the end of this section, although work co-authored with staff members also appears in the Research section.

## Dissertations Completed

The following dissertations were completed during the last academic year:

October 1980 Raymond Langsten: "Causes of Changes in Vital Rates: the Case of Bangladesh"  
Albert Hermalin and Ronald Freedman, co-chairs

Dr. Langsten holds a post-doctoral fellowship at the Carolina Population Center.

December 1980 Vasantha Kandiah: "Childspacing in Peninsular Malaysia, 1966/67-1974"  
William Mason and Ronald Freedman, co-chairs  
Albert Hermalin, member

Dr. Kandiah is presently with the Population Division of the United Nations.

January 1981 Judith Seltzer: "Familial Sources of Children's Psychological Well-Being"  
Albert Hermalin and William Mason, co-chairs  
Karen O. Mason, member

Dr. Seltzer now has a post-doctoral fellowship at the University of Wisconsin Center for Demography and Ecology.

April 1981 Thomas Fraker: "The Effects of Social Security Wealth on the Resolution of Unemployment Spells of Older Men"

Dr. Fraker is a member of the economics faculty of Western Michigan University.

June 1981 Patricia A. Gwartney-Gibbs: "Married Women's Work Experience: Intermittency and Female Typed Occupations"  
Reynolds Farley and Mary Corcoran, co-chairs

Dr. Gwartney-Gibbs has joined the sociology faculty of the University of Oregon.

June 1981 Kim-Loy Chee: "Poverty Status and Coresident Family Structure: A Case Study of West Malaysia"  
William Mason, chair  
Ronald Freedman, Albert Hermalin and Eva Mueller, members

Dr. Chee has returned to his position with the University of Science, Panang, Malaysia.

## Prospectuses Approved:

The following is a list of prospectuses approved during the 1980-81 academic year:

Osman Nur "The Validity of Fertility Analysis from Maternity History Data (Jordan)"  
Albert Hermalin, chair  
Ronald Freedman and John Knodel, members

William Lavelly "Industrialization, Family Structure and Fertility in Rural Taiwan"  
Ronald Freedman, chair  
Albert Hermalin and Eva Mueller, members

Sara Millman "Breastfeeding in Taiwan: A Study of Change"  
John Knodel, chair  
Karen O. Mason, Ronald Freedman and Eva Mueller, members

Nilufer Ahmed "A Multi-Level Analysis of Fertility in Bangladesh"  
Albert Hermalin and William Mason, co-chairs  
Eva Mueller and Ronald Freedman, members

In addition to those students who have had prospectuses approved, the following eight students have made substantial progress toward completion of their dissertations:

- Napaporn Chayovan "A Contextual Analysis of Demographic Phenomena in Rural Thailand"  
John Knodel and Ronald Freedman, co-chairs
- Hallie Kintner "The Determinants of Three Features of German Infant Mortality in the Late Nineteenth and Early Twentieth Centuries"  
John Knodel, chair  
Albert Hermalin and William Mason, members
- Herbert Smith "Prospective Social and Demographic Determinants of Higher Education Enrollment"  
David Goldberg and William Mason, co-chairs  
Albert Hermalin, member
- Linda Swanson "An Investigation of the Reversal of Metropolitan-Nonmetropolitan Migration Streams in the United States, 1965-1979"  
David Goldberg, chair  
Reynolds Farley, Eva Mueller and Ronald Freedman, members  
Ms. Swanson is presently with the U.S. Department of Agriculture in Washington.
- Clarence Wurdock "Determinants of Neighborhood Racial Transition in the Detroit Metropolitan Area"  
Reynolds Farley, chair  
Mr. Wurdock is a demographer at the University of Louisville.
- Helge Brunborg "Contraceptive Decisions in Norway"  
Ronald Freedman, member  
Mr. Brunborg works for the Norwegian Central Bureau of Statistics.
- Sou-Pen Wei "The Effect of Family Structure on Siblings' Status Achievement: The Case of Taiwan"  
Ronald Freedman and Albert Hermalin, co-chairs  
Eva Mueller and William Mason, members
- Susan De Vos "Generational Interdependence and Reproduction: Philippines and Taiwan, 1975-1977"  
Ronald Freedman, chair

## Publications and Achievements

The following lists the individual publications of Center students as well as their collaborative publications with the professional staff. The names of students are singled out above their publication(s); the name of co-authors, if any, are listed parenthetically in order of their contribution.

### Nilufer Ahmed

"Family Size and Sex Preferences Among Women in Rural Bangladesh," *Studies in Family Planning* 12(3): 100-109, March 1981.

### Paul P.L. Cheung

(Herbert Smith and Paul Cheung) "Logistic Regression Models with Continuous Independent Variables: A Comment on Swafford," *American Sociological Review*, in press.

(Peter C. Smith and Paul Cheung) "Social Origin and Sex Differential Schooling in the Philippines," *Comparative Education Review* 25(1), 1981.

(with Walter W. Hudson) "Assessment of Marital Discord in Social Work Practice: A Revalidation of the Index of Marital Satisfaction," *Journal of Social Service Research* 4(4), 1981.

### Susan De Vos

"Evidence on the Old Age Security Hypothesis -- Taiwan, 1976," paper presented at the Southern Sociological Society meetings, Louisville, Ky., April 1981.

(Karen Mason and Susan De Vos) "Trends and Differentials in Peninsular Malaysian Fertility," Research Report No. 81-2, Population Studies Center, University of Michigan, 1981.

"Women's Role Orientations and Expected Fertility: Evidence from the Detroit Area, 1978," *Social Biology* 27(2), Summer 1981.

### Scott Grosse

"A Skeptical Perspective on Income Redistribution and Poverty Reduction in Sri Lanka," Discussion Paper No. 91, Center for Research on Economic Development, University of Michigan, June 1981.

(with James N. Morgan) "Intertemporal Variability in Income and the Interpersonal Distribution of Economic Welfare," in *Five Thousand American Families — Patterns of Economic Progress, Vol. 9*, edited by Martha S. Hill, Daniel H. Hill and James N. Morgan, Ann Arbor: Institute for Social Research, 1981, pp. 297-315.

"The Politics of Family Planning in the Maghrib," *Studies in Comparative International Development*, forthcoming.

"Comment on 'Regime Type and Performance: Authoritarian Rule, Semi-Capitalist Development, and Rural Inequality in Asia,' by Dwight King," *Comparative Political Studies*, Winter 1982, forthcoming.

"The 'Moors' of Sri Lanka: Ethnic Accommodation in a Plural Society," *Ethnic Groups*, forthcoming.

### **Patricia A. Gwartney-Gibbs**

Discussant, Work and Occupations Session, North Central Sociological Association meetings, Cleveland, April 1981. (Patricia A. Taylor, Patricia A. Gwartney-Gibbs and Reynolds Farley) "The Changing Structure of Earnings Inequality, 1960-1978," submitted for publication.

### **Sherrie Kossoudji**

(with Eva Mueller) "The Economic and Demographic Status of Female Headed Households in Rural Botswana," Research Report No. 81-10, Population Studies Center, University of Michigan, 1981.

also to appear in *Economic Development and Cultural Change*.

### **William Lavelly**

Spent the 1980-81 academic year at the Population Research Institute of Sichuan University in Chengdu, People's Republic of China, as one of ten Americans and the only student from Michigan, sponsored by the Committee on Scholarly Communication with the People's Republic of China.

### **Sara Millman**

"Breastfeeding in Taiwan: Trends and Differentials, 1966-1980," paper presented at the Annual Meetings of the Population Association of America, Washington, March 1980.

### **Mark Montgomery**

"Estimation with Inequality Constraints: A Synthesis," (with Douglas Woodham) paper prepared for Econometrics Society Meetings, Denver, September 1980.

### **Herbert Smith**

(with Paul Cheung) "Logistic Regression Models with Continuous Independent Variables: A Comment on Swaford," *American Sociological Review*, in press.

(William Mason and Herbert Smith) "Age-Period-Cohort Analysis and the Study of Deaths from Pulmonary Tuberculosis," in *Analyzing Longitudinal Data for Age, Period and Cohort Effects*, edited by H.H. Winsborough and O.D. Duncan, New York: Academic Press, forthcoming.

## **Former Students**

Typically, upon completion of their training at the Center, students obtain employment in academic institutions. In recent years, however, both business and government have recognized the importance of demographic research to policy making; consequently, more recent graduates are accepting non-academic positions both in the United States and abroad. Of the six trainees who graduated during 1980-81, two took positions in non-academic institutions and four went to universities. A list of the 90 Center trainees who have received Ph.D.'s in Sociology or Economics since the Center's inception in 1962 is given below. The variety of institutions with which

they are now affiliated gives an overview of the scope of preparation provided at the Center.

In addition to the Ph.D. recipients listed, many students from the U.S. and abroad have received shorter-term Center training. In all, over 80 former trainees currently hold academic positions at about 32 universities in the United States and seven universities abroad. More than 60 are involved in research in about 18 national, 10 foreign, and seven international organizations concerned with population issues. (Modern mobility complicates any attempt to account for all the students who have had training at the Center, and thus we acknowledge that this list may not be complete.)

### **Former Population Studies Center Trainees with a Ph.D. from the University of Michigan** (Chronologically listed - 1962 to 1981)

#### **Krishnan Namboodiri**

Professor and Chairman (Sociology)  
University of North Carolina

#### **Tattamangalam R. Balakrishnan**

Professor (Sociology)  
University of Western Ontario

#### **Allan G. Feldt**

Professor (Urban and Regional Planning, Natural Resources)  
University of Michigan

#### **William Smit**

Professor (Sociology)  
Calvin College

#### **William F. Pratt**

Chief, Family Growth Survey Branch  
National Center for Health Statistics

#### **Partha S. Mohapatra**

Deceased 1976

#### **Kodagallanur Srikantan**

Institute for Social and Economic Change  
Bangalore, India

#### **Roy C. Treadway**

Associate Professor (Sociology)  
Illinois State University

#### **Frederick L. Campbell**

Associate Professor (Sociology)  
University of Washington

#### **Larry L. Bumpass**

Associate Director for Training, Center  
for Demography and Ecology  
and Professor (Sociology)  
University of Wisconsin

#### **Patricia Ferman Ryan**

Professor (Sociology)  
Eastern Michigan University

#### **Robert M. Hauser**

Professor (Sociology) and Director  
(Training Programs in Social Methods)  
University of Wisconsin

- Anrudh K. Jain**  
Senior Associate (International Programs)  
The Population Council  
New York
- Albert M. Marckwardt**  
Demographer  
CELADE  
Santiago, Chile
- William S. Pooler**  
Associate Professor (Sociology)  
Syracuse University
- Allan Schnaiberg**  
Associate Professor (Sociology)  
Northwestern University
- Te-Hsiung Sun**  
Director  
Taiwan Provincial Institute of Family Planning
- James A. Sweet**  
Professor (Sociology) and Director  
Center for Demography and Ecology  
University of Wisconsin
- Solomon S. P. Chu**  
Assistant Professor (Epidemiology and Biometry)  
School of Public Health  
University of Illinois - Chicago
- David L. Featherman**  
Professor and Chairman (Rural Sociology)  
and Research Associate, Center for Demography and  
Ecology  
University of Wisconsin
- Charles R. Kinderman**  
Acting Director (Statistics Division)  
U.S. Department of Justice  
Law Enforcement Assistance Agency
- Alden Speare**  
Associate Professor (Sociology)  
Brown University
- Jay I. Stark**  
General Motors Corp.  
Detroit, Michigan
- Arjun L. Adlakha**  
Professor (Biostatistics) and Research Associate  
(POPLAB)  
University of North Carolina
- Greer L. Fox**  
Associate Professor (Sociology) and Director  
Family Research Center  
Wayne State University
- Judith L. Friedman**  
Associate Professor (Human Ecology)  
Cook College, Rutgers University
- Samuel R. Friedman**  
Assistant Professor (Sociology)  
Montclair State College
- Robert Lapham**  
Staff Director, Committee on Population and  
Demography  
National Research Council — National Academy of  
Sciences
- Baron L. Moots**  
Assistant Research Scientist  
Population Studies Center  
University of Michigan
- Bruce L. Warren**  
Associate Professor (Sociology)  
Eastern Michigan University
- Gordon S. Bonham**  
Survey Statistician  
Division of Health Interview Statistics  
National Center for Health Statistics
- Eugene P. Ericksen**  
Head of Sampling Division  
Institute for Survey Research  
Temple University
- David D. McFarland**  
Associate Professor (Sociology)  
University of California - Los Angeles
- Shea O. Rutstein**  
Research Associate, Analysis Division  
World Fertility Survey  
London
- Fred Arnold**  
Assistant Director  
East-West Population Institute — East-West Center  
Honolulu
- George K. Jarvis**  
Associate Professor (Sociology)  
University of Alberta
- Allan Griswold Johnson**  
Assistant Professor (Sociology)  
Wesleyan University
- Richard B. Anker**  
Project Director, World Employment Program  
International Labor Organization  
Geneva, Switzerland
- Paul M. Hirsch**  
Assistant Professor (Sociology)  
University of Chicago
- Howard M. Iams**  
Statistician  
Office of Research and Statistics  
Social Security Administration
- Paul K. C. Liu**  
Economist  
Institute of Economics - Academia Sinica  
Taipei, Taiwan
- Maurice M. MacDonald**  
Assistant Professor  
School of Family Resources  
University of Wisconsin

**Lois B. Shaw**  
Senior Research Associate  
Center for Human Resource Research  
Ohio State University

**Ross Stolzenberg**  
Rand Corporation  
Santa Monica, California

**Boone A. Turchi**  
Associate Professor (Economics)  
University of North Carolina

**John Ellis Anderson**  
Demographer, Family Planning Evaluation Division  
Center for Disease Control  
Atlanta, Georgia

**Hsiao-Chang Chen**  
Visiting Associate, Family Planning  
Evaluation Division  
Center for Disease Control  
Atlanta, Georgia

**Hasan Zafer Dogan**  
Research Associate  
The Population Council, Yozgat Project  
Ankara, Turkey

**Barry James Edmonston**  
Assistant Professor (Sociology)  
Cornell University

**Mark Evers**  
Assistant Professor (Sociology)  
University of Oregon

**Elizabeth M. Fischer**  
Assistant Professor (Sociology) and  
Associate Director (Social Science Data Library)  
Institute for Research in Social Science  
University of North Carolina

**John Leroy Goodman**  
Senior Research Associate  
The Urban Institute  
Washington, D.C.

**Lois Verbrugge**  
Associate Research Scientist  
(School of Public Health)  
University of Michigan

**James C. Cramer**  
Assistant Professor (Sociology)  
University of California-Davis

**Arland Thornton**  
Assistant Professor (Sociology) and Senior  
Study Director, Survey Research Center  
Institute for Social Research  
University of Michigan

**Andrew Mason**  
Research Associate, East-West Population Institute  
East-West Center, Honolulu, and Assistant Professor  
(Economics)  
University of Hawaii

**Paul Ronald Voss**  
Assistant Scientist  
Department of Rural Sociology  
University of Wisconsin

**Joseph Chamie**  
Demographer, Population Division  
United Nations  
New York

**Linda Waite**  
Rand Corporation  
Santa Monica, California

**Stanley Smith**  
Assistant Professor (Economics)  
University of Florida

**Martha Hill**  
Study Director, Survey Research Center  
Institute for Social Research  
University of Michigan

**Rex Y. Leghorn**  
Assistant Professor (Sociology)  
Emory University

**Roberta Barnes**  
Research Associate, Income Security and Pension Policy  
Urban Institute  
Washington, D.C.

**Diane Colasanto**  
Assistant Professor (Sociology)  
University of Wisconsin

**Barbara Devaney**  
Assistant Professor (Economics)  
John Hopkins University  
and Assistant Professor (Public Policy)  
Duke University

**Jennifer Madans**  
Statistician, Division of Analysis  
National Center for Health Statistics  
Hyattsville, Maryland

**Robert Mare**  
Assistant Professor (Sociology)  
University of Wisconsin

**Margaret O. Nielsen**  
Assistant Professor (Sociology)  
School of Social Work  
Michigan State University

**Nelson Silva**  
Director, Department of Population Studies  
Brazilian Census Bureau  
Rio de Janeiro, Brazil

**Eugene Won**  
Systems Development Corporation  
Santa Monica, California

**Robert Klein**  
Survey Statistician  
Office of Research and Statistics  
Social Security Administration

**Suzanne Bianchi**  
Assistant Professor (Sociology)  
University of Illinois

**Mohammad K. Siddiqui**  
Demographer/Statistician  
United Nations Economic Commission for Europe  
Geneva, Switzerland

**Carol Clark**  
Consultant, Family Development  
Rand Corporation  
Santa Monica, California

**Robert A. Johnson**  
Assistant Professor (Sociology)  
Iowa State University

**John Czajka**  
Research Sociologist  
Mathematica Policy Research, Inc.  
Washington, D.C.

**Katharine Gaskin**  
Flat 2, 113 Canfield Gardens  
London

**John Casterline**  
Research Associate, Analysis Division  
World Fertility Survey  
London

**Makoto Nohara Atoh**  
Institute of Population Problems  
Ministry of Health and Welfare  
Tokyo, Japan

**David S. Thompson**  
Assistant Research Scientist  
Highway Safety Research Institute  
University of Michigan

**James F. Phillips**  
Associate Scientist, Population Control  
International Center for Diarrhoeal Disease Research  
Dacca, Bangladesh

**Ernest B. Attah**  
Assistant Professor (Sociology)  
Atlanta University

**Melissa H. Clark**  
Assistant Professor (Sociology)  
University of Mississippi

**Toni Richards**  
Post-Doctoral Fellow  
Committee on Population and Demography  
National Academy of Sciences

**Raymond Langsten**  
Post-Doctoral Fellow  
Carolina Population Center

**Vasanthia Kandiah**  
Population Division  
United Nations

**Judith Seltzer**  
Center for Demography and Ecology  
University of Wisconsin

**Patricia A. Gwartney-Gibbs**  
Assistant Professor (Sociology)  
University of Oregon

**Kim-Loy Chee**  
Senior Research Fellow, Centre for Policy Research  
University of Science  
Penang, Malaysia

**Thomas Fraker**  
Assistant Professor (Economics)  
Western Michigan University

## Courses in Demography

Many members of the Center's professional staff also serve on the faculty of either the Department of Sociology or the Department of Economics. Their instructional responsibilities include teaching the following graduate courses, which Center students are either required or encouraged to take. Center fellows (students in the Sociology Department) are required to take one of the following courses every semester they are enrolled until they achieve candidacy.

**Sociology 530 - Population Problems.** An intensive analysis of the basic demographic processes and their causes. How variations in mortality, fertility, nuptiality and migration arise and how they affect society. Illustrations are drawn from the United States and a variety of developed and underdeveloped countries.

**Sociology 531 - Regional Population Problems.** This course focuses on the population aspects of social problems - food, energy, pollution, etc. - the role of population variables in the problems of social development, and social policies that are concerned with the population aspects of these problems. It considers these issues in the context of specific countries representing a range of demographic situations.

**Sociology 535 - The Urban Community.** A descriptive study of the form and development of the urban community with respect to demographic structure, spatial and temporal patterns and functional organization, with attention to the sources of data and techniques of analysis appropriate to the study of population distribution.

**Sociology 536 - Human Ecology.** Deals with the forms and modes of change of social structure as affected by interactions with the environment and population.

**Sociology 630 - Research Methods in Population and Human Ecology.** An examination of the nature and structure of a large number of demographic techniques useful for studying population composition or analyzing population dynamics. Involves both review of literature and computations using the techniques.

**Sociology 631, 632 - Advanced Population Methods.**

These courses focus on the formal development of models to study the growth, distribution, change and movement of human population with emphasis on mathematical models which lead to empirically verifiable theory. Topics include models for studying stable populations, the reproduction processes and the translation of period to cohort rates. Attention is also given to data sources and statistical techniques used in studying the interrelationships of population distribution, division of labor and community structure.

**Sociology 633 - Proseminar in Historical Demography.** A survey of the data sources and the methods of data organization and analysis peculiar to historical demographic research along with selected substantive topics.

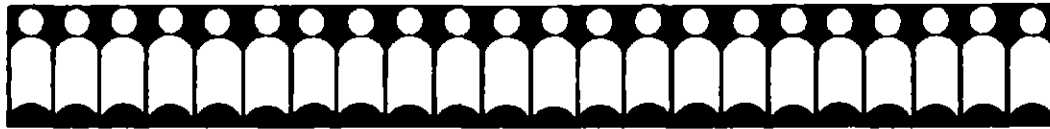
**Sociology 830, 831 - Seminar in Population and Human Ecology.** A variety of substantive and methodological topics are taken up in a seminar format.

**Economics 466 - Economics of Population.** Analysis of the causes and effects of population changes from the standpoint of economic theory. (For upper-class undergraduates and as an introduction for graduates.)

**Economics 667 - The Economics of Population Growth.** Examines the economic determinants of demographic behavior, with a focus on the economics of fertility, as well as the consequences of demographic change in both developed and less developed countries and the economic aspects of population policy and family planning programs.

**Economics 867, 868 - Seminar in the Economics of Population.** A seminar covering a variety of topics in the form of (1) a detailed discussion of an important recent article or series of articles; (2) presentation of research plans or findings by trainees or faculty members; (3) presentation of research by a visitor.





# SERVICE ACTIVITIES

A important function of those population centers which contain a critical mass of professionals is the ability to devote some portion of staff time to domestic and international service. Such activities aid in the development of the field and influence public policy decisions related to population issues. The staff of the Population Studies Center has a long history of this kind of service, including appointments on task forces and commissions, and as consultants to the federal government, private organizations, and international organizations. Staff members are also called upon to present papers and serve as discussants at various conferences and colloquia. Some of the major current professional and public service activities, both domestic and international, are listed below.

## **Lolagene C. Coombs**

Consulted with researchers from Aachen, Germany on a study of fertility preferences in West Germany, December 1980

Consulted with members of the National Taiwan University, the Academia Sinica, and the Taiwan Provincial Institute for Family Planning, Taipei and Taichung, Taiwan, March-April 1981

Consulting editor, *Population and Environment*

Reviewer, *Demography*, *Population and Environment*, and *Studies in Family Planning*

## **Lee Edlefsen**

Discussant, Econometric Society Meetings, Denver, September 1980

Presented papers, "The Opportunity Cost of Time, and the Numbers, Timing, and Spacing of Births," "The Theory of Rationing, Le Chatelier Phenomena, and the Comparative Statics of Multiple Constraints," and "The Comparative Statics of Hedonic Price Functions and Other Non-Linear Constraints." Econometric Society Meetings, Denver, September 1980

## **Barbara Entwisle**

Provided editorial assistance for *The Use of Surveys for the Analysis of Family Planning Programmes* (Proceedings of the IUSSP Seminar, Bogota, Columbia, October 1980)

Presented paper, "On the Relationship Between Pension Programs and Fertility Levels." American Sociological Association Annual Meetings, New York City, August 1980

Presented paper, "Fertility as a Determinant and Consequence of State-Sponsored Pension Programs in LDCs." (with C.R. Winegarden) Population Association of America Annual Meetings, Washington, March 1981

## **Reynolds Farley**

Consultant to Professor Robert Green, chief desegregation advisor, Chicago Public Schools, January-March 1981

Chairperson, Population Section, American Sociological Association, 1980

Chairperson, Population Advisory Committee, U.S. Bureau of the Census, April 1980-April 1981

Chairperson, Sociology Department, University of Michigan, to June 1981

Vice-President, Population Association of America, 1981

Publications Liaison Officer, Social Science Section, American Statistical Association, 1980

Member, Executive Committee, Social Science Research Council Committee for Research on the 1980 Census, 1981

Member, Institute for Social Research Executive Committee, University of Michigan

Presented didactic seminar, "Measuring Sex and Race Discrimination." American Sociological Association Meetings, New York City, August 1980

Presented round table, "What Accounts for the Rise in Homicide?" American Sociological Association Meetings, New York City, August 1980

Organizer of session, "Contemporary Issues in Race and Ethnic Statistics." American Statistical Association Meeting, Houston, August 1980

Discussion leader, Round Table on Race and Ethnic Statistics. American Statistical Association Meeting, Houston, August 1980

Organizer and discussant, "The Black Ghetto and Black Labor Radicals," Organization of American Historians meeting, Detroit, April 1981

Presented paper and served as panel member, "The New Demographic Practitioner: Broad Opportunities for Employment." Annual Meetings of the Population Association of America, Washington, March 1980

Presented the Pierce Lecture, Oberlin College: "Trends in the Status of Blacks in the United States," March 1981

Presented paper, "School Segregation and its Implications for Urban Populations," as part of an urban revival lecture series at Purdue University, March 1981

Participant, Conference on Education and the Courts, sponsored by the Aspen Institute for Humanistic Studies, July 1980

Presented paper, "Blacks and Whites in the United States." Russell Sage Foundation Conference, New York City, September 1980

#### **Deborah Freedman**

Organizer, Session on Longitudinal Studies of Fertility, Annual Meetings of the Population Association of America, Washington, March 1981

Keynote speaker, Careers Day Conference at Adrian College, Adrian, Mich., October 1980

Discussant, Session on Reducing Poverty and Other Considerations for Working Women, NATO Conference on Women and the World of Work, Estoril, Portugal, August 1980

Presented paper, "Obtaining Respondent Cooperation in Panel Studies and Studies Involving Multiple Family Members." (with Arland Thornton and Donald Camburn) Annual Meetings of the Population Association of America, Washington, March 1981

Attended meetings of the Advisory Committee for the Contract Division for the Center for Population Research, NICHD, July and October 1980

Participated in interview programs, CBS News, two Detroit radio stations, a North Carolina station, one overseas station of the International Communications Agency, July through October 1980

#### **Ronald Freedman**

Consulted in Taipei and Taichung, Taiwan, with Chinese collaborators in the research project on The Changing Family Network and Fertility in Taiwan, about the pretesting of reinterview schedules for field work to begin in fall of 1981, March-April 1981

Observer and consultant to officials of the government of

the People's Republic of China, on evaluation of statistics and of the birth planning program, visiting Beijing, Nanjing, Shanghai, Xian and Chengdu under the sponsorship of the World Health Organization, April 1980

Chairperson, Workshop on Anthropology and the Study of Human Fertility, convened by the Panel on Fertility Determinants, National Academy of Sciences, Washington, February 1981

Member, Panel on Fertility Determinants, National Academy of Sciences, meeting in Ann Arbor, July 1980 and in Santa Monica, January 1981

Participant, Workshop on Population Research in The People's Republic of China, National Academy of Sciences, Washington, D.C., October 1980

Recipient, Irene B. Taeuber Award from the Population Association of America and the Office of Population Research of Princeton University, during the Annual Meetings of the Population Association of America, Washington, March 1981.

Participant, Seminar on Studies of Family and Fertility in Taiwan, Hong Kong University, Hong Kong, April 1981

Participant, Workshop on Evaluation and Statistics of China's Birth Planning Program, under the auspices of the State Council Leading Group on Birth Planning, Beijing, China, May 1981

Visited Hong Kong Statistical Office, Family Planning Association of Hong Kong, and Hong Kong University, April 1981

Member, Committee on Population and Demography, National Academy of Sciences, meeting in Washington, September 1980

Member, Interdisciplinary Science Advisory Panel, Alan Guttmacher Institute

Member, Committee on Comparative Analysis of Fertility, International Union for the Scientific Study of Population  
Referee, *Demography*, *Studies in Family Planning*

#### **William H. Frey**

Consultant, the University of Wisconsin, Madison, on Monitoring Production of Public Use Sample Files from the 1940 and 1950 Censuses of Population

Consultant, The Urban Institute, on Urban Residential Mobility in the 1970s

Visiting Research Scholar, Human Settlements and Services Area, International Institute for Applied Systems Analysis, Laxenburg, Austria, September 1980-February 1981

Member, Working Group on Spatial Distribution, National Committee for Research on the 1980 Census, Social Science Research Council, April 1981

Member, Advisory Committees on 1980 U.S. Census Volume II Subject Reports: *Recent and Lifetime Migration*, *Migration for States*, *Residential Mobility for Metropolitan and Nonmetropolitan Area*, and *Persons by Tract Characteristics*, U.S. Census Bureau, July 1980

Presented paper, "White Return to the City, Black Suburbanization, and Projected Changes in Future City Populations." Annual Meetings of the American Sociological Association, New York City, August 1980

Presented paper, "Family Change and the Changing Cities." (with Frances E. Kobrin) Annual Meetings of the Population Association of America, Washington, March 1981

Referee, *Demography*

#### **David Goldberg**

Member, Panel on Fertility Determinants in Less Developed Countries, National Academy of Sciences

Presented paper, "The Continuing Growth of Non-Metropolitan Areas in Michigan." Governor's Commission on the Growth and Development of Towns and Cities, Big Rapids, Mich., August 1980

Presented report, *Fertility Values and Behavior: Mexican Populations* to the U.S. Senate Select Commission on Immigration and Refugee Policy, Washington, November 1980

Presented paper, "The Future Population of Detroit and Michigan." Population Resource Center Conference on Demographic Change and Implications in the 1980s, Dearborn, Mich., March 1981

Presented paper, "The Older Population of Michigan, 1980." University of Michigan Institute of Gerontology Conference on Older Workers: Untapped Resources, Warren, Mich., June 1981

#### **Albert Hermalin**

Chairperson, Committee for the Analysis of Family Planning Programs, International Union for the Scientific Study of Population

Organizer, International Seminar on the Role of Surveys in Analyzing Family Planning Programs, sponsored by IUSSP, held in Bogota, Colombia, October 1980

Member, Population Research Committee, National Institute of Child Health and Human Development

Member, Taeuber Award Committee, Population Association of America

Member, Public Affairs Committee, Population Association of America

Member, International Advisory Board, *Studies in Family Planning*

Member, Advisory Panel to the Committee on Gender Studies, University of Michigan

Discussant, Population Association of America Annual Meetings, Washington, March 1981

Discussant, World Fertility Survey Conference, London, August 1980

Lecturer, Summer Seminar Series, East-West Population Institute, Honolulu, June 1981

Reviewer for *Studies in Family Planning, American Statistician*, National Science Foundation

#### **John Knodel**

Member, Board of Directors, Population Association of America

Participant, World Fertility Survey Conference, London, August 1980

Member, supplementary review panel for National Institutes of Health grants

Member, mission to evaluate data analysis methods, University of North Carolina, for the American Public Health Association under a contract from AID

Participant, mission to evaluate the World Fertility Conference for AID and UNFPA, traveling to England, Thailand, Nepal, and the Philippines, July-September 1980

Reviewer, National Science Foundation

Presented paper, "Fertility and Fecundity in Transition: The Experiences of German Village Populations in the 18th and 19th Centuries." Social Science History Association meetings, November 1980

Presented paper, "Breastfeeding in Thailand 1969-1979: Trends, Differentials and Demographic Implications." American Public Health Association Meetings, October 1980

Referee, *Social Biology, Demography, Studies in Family Planning, and Social Science History*

#### **Karen Oppenheim Mason**

Member, Nominations Committee, Population Association of America, 1980

Member, Jessie Bernard Award Committee, American Sociological Association

Member, Editorial Board, Caroline and Arnold Rose Monograph Series, American Sociological Association

Member, Editorial Board, *Women and Culture* Series, University of Michigan Press

Main speaker, Workshop to acquaint policy-makers with recent AID-sponsored population research, Washington, December 12, 1980

Participant, Workshop on the National Longitudinal Studies of Labor Market Experience, Columbus, Ohio, May 4, 1981

Presented paper, "Female Employment and Fertility in Peninsular Malaysia: The Maternal Role Incompatibility Hypothesis Reconsidered." Annual Meetings of the Population Association of America, March 1981

**William M. Mason**

Discussant, *World Fertility Conference*, London, August 1980

Member, Advisory and Planning Committee, Center for Coordination of Research on Social Indicators, Social Science Research Council

**Eva L. Mueller**

Consultant, National Institutes of Health

Consultant, Agency for International Development

Editorial consultant, *Economic Development and Cultural Change*, *Demography*

Reviewer, *American Economic Review*

**Paul Richardson**

Participant, Seminar on the Use of Surveys for the Analysis of Family Planning Programmes, Bogota, Colombia, October 1980

Participant, Annual Meetings of the Population Association of America, Washington, March 1981

**Albert Simkus**

Presented paper, "Socialist Structural Transformation and Social Mobility." Annual Meetings of the Population Association of America, Washington, March 1981

Presented paper, "Socioeconomic Careers and Radical Social Change." Annual Meeting of the American Association for the Advancement of Science, Toronto, January 1981



# STAFF ROSTER

Below is a list of staff members currently serving at the Population Studies Center for the academic year 1981-82.

## **Director**

Albert I. Hermalin, Professor of Sociology

## **Associate Directors**

Lolagene Coombs, Research Associate (*Operations*)

Ronald Freedman, Professor of Sociology (*Development*)

Karen Mason, Associate Professor of Sociology (*Training*)

## **Research Associates**

Albert Anderson, Assistant Research Scientist

Neil G. Bennett, Mellon Research Associate

J. Michael Coble, Assistant Research Scientist

Barbara Entwisle, Mellon Research Associate

Reynolds Farley, Professor of Sociology (*on leave*)

Deborah Freedman, Assistant Professor of Economics

William H. Frey, Mellon Research Associate

David Goldberg, Professor of Sociology

John Knodel, Associate Professor of Sociology

William M. Mason, Associate Professor of Sociology

Baron Moots, Assistant Research Scientist

Eva L. Mueller, Professor of Economics

Albert Simkus, Assistant Professor of Sociology

## **Visiting Faculty**

Lee Edlefsen, Visiting Assistant Professor of Economics

## **Supporting Staff**

Susan Etter, Administrative Associate

Mary Scott, Administrative Assistant

Susan Van Eck, Information and Resources Coordinator

Linda Atkins, Receptionist

Fran Cartford, Programmer Analyst

Ruth Crankshaw, Secretary

Carol Crawford, Secretary

Kathleen Duke, Library Assistant

Lois Groesbeck, Secretary

Amy Hsu, Programmer

Janice Johnson, Research Assistant

Peggy Jones, Accounts Clerk

Judy Mullin, Secretary

Linda Rentfro, Data Processing Clerk

Jon Sell, Programmer Analyst

Dorothy Strand, Secretary

Mary Claire Toomey, Secretary