

# **DEMOGRAPHIC DESTINIES**

## **Interviews with Presidents of the Population Association of America**

### **Interview with Albert Hermalin PAA President in 1993**



This series of interviews with Past PAA Presidents was initiated by Anders Lunde  
(PAA Historian, 1973 to 1982)

And continued by Jean van der Tak (PAA Historian, 1982 to 1994)

And then by John R. Weeks (PAA Historian, 1994 to present)

With the collaboration of the following members of the PAA History Committee:  
David Heer (2004 to 2007), Paul Demeny (2004 to 2012), Dennis Hodgson (2004 to  
present), Deborah McFarlane (2004 to 2018), Karen Hardee (2010 to present), Emily  
Merchant (2016 to present), and Win Brown (2018 to present)

## ALBERT HERMALIN

PAA President in 1993 (No. 56). Interview with Jean van der Tak at Jean's home in Washington, D.C., October 30, 1994.

**CAREER HIGHLIGHTS:** Albert Hermalin was born in 1928 in New York City, where he was brought up. He obtained the B.S. in mathematics and statistics from the City College of New York in 1949. From 1949 to 1964--except for two years in the army, 1950-52--he was with the Institute of Life Insurance, rising to be Associate Director of the Division of Statistics and Research. He entered Princeton as a Milbank Memorial Fund Fellow in 1964 and from there received the M.A. in 1966 and the Ph.D. in 1969, both in sociology and anthropology. Since 1967 he has been at the University of Michigan where, among other posts, he has been Professor of Sociology in the Department of Sociology (since 1978) and Director (1977-87; 1990-91) of the Population Studies Center and Research Scientist (since 1987) at the Center. He has been adviser, committee member and chair to many population-related organizations, such as the Committee on Population of the National Research Council, the Census Bureau, the Alan Guttmacher Institute, the Population Council, the United Nations, and the International Union for the Scientific Study of Population. Among his awards, he was the first recipient, in 1988, of the Robert Lapham Award of the Population Association of America, given for "contributions that blend research with the application of demographic knowledge to policy issues" and for "service to the population profession."

Al Hermalin is well known in the population world for his research and publications on the evaluation of family planning programs, generally in Asia and especially Taiwan, where Michigan was involved when he joined the faculty and still is, and for his work in developing better methods for the analysis of fertility and, most recently, his work on the elderly in developing countries. He is author, coauthor or coeditor of four books and over 60 articles and book chapters in population, as well as several publications stemming from his earlier work in the field of life insurance. [Dr. Hermalin died in Ann Arbor, Michigan in 2021.]

**VDT** [from interview introduction]: Dr. Hermalin is in Washington from Ann Arbor for the fall meeting of the PAA Board, which was held yesterday [October 29, 1994].

I thank you very much for making time for this interview, Al. I've long pursued you, hoping to end up my series of interviews with PAA presidents and secretary-treasurers with you. This will be the fourth and last supplement to Demographic Destinies, which I put out in 1991. That had 49 interviews and with this, there will be four more. I know you are interested in the series too, because you were the fourth person to actually buy a set of Demographic Destinies after I had distributed my complimentary copies.

I note from your curriculum vitae that you spent 1950-52 in the army; that was during the Korean War. Were you drafted?

**HERMALIN:** Yes, just a few months after the war started.

**VDT:** But you were based in Alabama and worked as a mathematician, so your skills weren't being wasted at that time.

**VDT** [after biographical introduction]: What led you into demography--and to Princeton--leaving what was obviously a fine career in the field of life insurance?

**HERMALIN:** I read a number of your previous interviews and I've been struck by the wide diversity of how people get into population and demography, because it seems--as some of your previous guests have noted--that it's not a thing you know you want to do when you're 12 or 15 years old.

In my case, I think the scenario is a little complex, in the following way. As you noted in the introduction, my degree was a Bachelor of Science degree. I took math and statistics as my main areas; I took a year in every science. You had to do a year in biology, a year in physics, a year in chemistry--those were the elements of a Bachelor of Science degree as against a Bachelor of Arts degree. So it was much more focused in the sciences, though I took quite a bit of philosophy and there were requirements in history, English, etc.

Consequently, I took relatively little social science. I remember a course that I thought very little of was sociology. We were required to take one course in sociology and I remember it was an older professor who seemed to me to be lecturing from yellowed notes and saying things that were quite obvious, like "people live in families" and "families combine with communities," and that didn't attract me as a scientific challenge in the way they were posed.

When I finished my undergraduate work in 1949, I had fairly well decided to go right into work. That was prior to the time when graduate schools were booming. At least it wasn't in my consciousness that this was a very strong option. I was asked by a dean at City College about my interest in a program to help develop teachers, but it didn't seem very attractive. My image of teaching was mixed. I knew I was reasonably good at explaining things to other people, because I often would coach people or help friends with math problems. And I felt I had a fairly good empathy with what people understood and what was blocking their understanding. But as a profession it seemed to me that it would not be very rewarding; you would basically be in a classroom with a high proportion of people who didn't want to be there at that particular time or place. And that seemed to me something that I didn't look forward to. Most of my thoughts about teaching were what it would be like to teach at the high school level or in a heavy teaching environment like City College, which was not a research university at that time. Research universities were not part of my experience.

So when I finished City College I was interested in working, and actuarial work seemed to be one reasonable outlet for my training in math and statistics. I looked into jobs with a number of insurance companies in New York, of which there were quite a few. At that time, as I recall, there was a bit of a recession after the immediate postwar boom, so employment was a little flat. But there was an opening at the Institute of Life Insurance which interested me a great deal because it wasn't just straight actuarial work. They were the public relations organization for the whole insurance industry, and the Division of Statistics and Research put out a very highly regarded life insurance factbook in which we collected a lot of information from all the insurance companies or from other sources. We developed in part the statistical database for the public and for the industry. So I applied for that job and I was fortunate to get it and started working there.

At the same time, I had to study and sit for the actuarial examination series that one has to take if one wants to be an actuary, which is mainly a graded set of exams that go through different aspects of the mathematics or subject matter of insurance, starting with examinations in finite differences, in compound interest, and then moving on to the substantive areas. I passed a number of those, but it wasn't a high priority for me in a way, because we were not an insurance company and there were not many actuaries around and we were not calculating rates or doing other actuarial work.

In the early 1960s, the new president of the Institute of Life Insurance felt that we ought to intersect more with the social and behavioral sciences and understand more of them, and he asked me to start to interview various professors in the New York area about what were some of the emerging social trends that the industry ought to be aware of. And I decided to take some courses at NYU in the evening to further my knowledge of the area, which as I said was relatively limited. I took a number of courses in that time. In fact, I think Charlie Westoff was teaching at NYU, but I didn't have a course with Charlie.

I took several courses in sociology--in stratification, small groups, mass media and other fields--with Marvin Bressler and others. Marvin was not at Princeton then, but he moved to Princeton in 1962 or so just about the time I started. I was very influenced by Professor Bressler. He was a wonderful teacher and I became very interested in sociology as a science of society. I realized that one could develop important hypotheses to test in a rigorous fashion. And I also became intrigued with the challenge of teaching because Marvin was such a wonderful teacher and could make people excited about the subject matter.

So after some discussions in the family--I'd married in 1961, my son was born in 1962 and I had a daughter being born in August 1964, a month before I moved to Princeton, so it took a little discussion--but we decided to do it.

**VDT:** Do it--meaning . . .

**HERMALIN:** Meaning to go to graduate school. And Princeton attracted me because when I started to look at schools, it was much less formal in how you proceeded. They looked at it as a three-year Ph.D. There weren't any number of required courses. You took your prelim examinations when you were ready--I think they called them the general exams there--and then you went on and wrote your dissertation. In their hazy thinking at that time, they thought this would be a three-year program roughly. It turned out not to be for almost anybody.

**VDT:** Except Sam Preston.

**HERMALIN:** Yes, it could be. Theoretically, if you had your data in hand by the time you finished your second year and knew where you were going, you could get done in three years. Going back to school after a number of years of employment that attracted me; I wanted to be able to move at my speed. I had always taken some courses in New York in different fields and had done well with the NYU courses, so I felt that I could go back to school successfully and compete. I felt I wanted to be able to move at my speed, so Princeton was attractive in that sense.

I applied to the department of sociology and then I received a call from Charlie Westoff, saying, "We'd like to offer you the Milbank [Memorial Fund fellowship]." I said, "What's involved?" He said, "You just have to agree to take population courses; you don't have to become a demographer or anything else."

**VDT:** You had thought you were going as a sociologist, into sociology?

**HERMALIN:** Yes. I knew OPR [Office of Population Research] was there and I had planned to take the courses. I had some knowledge of demography; I had conducted some mortality analysis at the Institute of Life Insurance. But I was not going because I thought, "Well, OPR is there and I'm going to become a demographer." I went back to be a sociologist, first, and not a demographer.

My area of specialization remained open for a long time. I accepted the Milbank and it was wonderful being at the Office of Population Research. You had an office or a space and it was a very rich environment. I took the courses and spent a lot of time focusing on the population-demography sequence. But at Princeton at that time, you had to offer four or five fields as part of your examinations. I did a field in theory, education, methods, and demography--something like that--four fields. I was very interested in the sociology of education; I was very interested in sociological theory.

In the mid-1960s the universities were growing so fast that there were many, many openings and one had to a large extent a choice of what kind of department one wanted to go to. There were more jobs, I dare say, than there were people coming out. So, in my third year I still had an open mind on whether I would end up in . . .

**VDT:** In your third year? Weren't you by that time already at Michigan?

**HERMALIN:** No, I left at the end of the third year. I went to Princeton in September 1964 and was in residence 64-65, 65-66, and 66-67. So in the third year, I was making decisions about my specialization and I still had somewhat of an open mind whether I would be a population specialist, a demographer, or something else. I had moved more and more to demography for a number of reasons. First of all, I had an office at OPR and I was getting more and more involved and I was interested in it, of course. And, secondly, I sensed a certain amount of lack of closure with some of the other areas of sociology where it wasn't as clear to me that one could mount the evidence successfully to test hypotheses as rigorously as one would like, so I had moved my thinking toward population and demography. But, as I say, even in the third year as I was looking for a job and thinking about jobs, I was still somewhat open as to what direction that would take.

You asked me [in pre-interview letter] how I got to Michigan, how Michigan figured.

**VDT:** Before we talk about how you got to Michigan, I want to talk a bit about your time at Princeton.

**HERMALIN:** As I say, I became more and more drawn to population. I was working at OPR quite a bit. There wasn't a formal mentoring program at the Office of Population Research. All the people who were either being supported by them or who were clearly interested in population, they gave them first space. And it was a very exciting time because they were also running an overseas program--a one-year certificate training program--and there were a lot of visitors from overseas. You made a lot of wonderful friends.

It was an interesting environment. It wasn't that I was working for anybody, but this was a very exciting period in population studies and there was a lot happening all around you. The indirect methods of estimation were being developed at a very rapid rate. Of course, Ansley Coale was the author and developer of many of these techniques and Ansley was actively engaged in doing the research. It was not rare for him to come in and lecture and say, "Look what I just found out" or "Look at this interesting relationship." So there was a great sense of new things happening in the field. It was a very exciting time both in the formal part and, of course, in the area of family planning. I remember Ansley coming back from a meeting talking about the IUD for the first time and discussing what its implications were and what the expectations might be. We were very aware that many of the countries at that time had very high growth rates. I remember we noted that Costa Rica was growing at over 3 percent, a very high rate of growth. At the same time, lots of new things were developing. I remember as students, we'd be surprised if we looked at Ansley Coale's exams of the year before; they always looked easy. The new exams were hard because they incorporated so much new material and last year's seemed trivial by comparison.

So there was a sense of excitement, of lots of things to be studied, lots of things happening. Of course, that made it a very interesting environment and also led me more and more to want to be a part of that and to make that the focus of my work in sociology.

The office always had lots of visitors. Frank Notestein used to come by quite often; so did Clyde Kiser of Milbank; a lot of people passed through the office. So that was exciting as well. Sometimes they would give talks; sometimes we would just chat. Of course, Irene Taeuber was there quite a bit, traveling back and forth. I remember chatting with her about a recent trip she was very excited about. And, of course, Charlie Westoff was conducting a number of big surveys--Metropolitan Growth in the United States [Princeton Fertility Study] and that series with Norm Ryder.

**VDT:** The National Fertility Study. They were picking it up [continuing from the Growth of American Families] and doing it in 1965.

**HERMALIN:** That's right. They were just starting that while they were continuing the metropolitan series [1955-70]. They had three books on the metropolitan series and then they dealt with the national surveys. So there was a lot of data on fertility and family planning and a lot of discussion of what was happening in that area. It was a very rich environment--in the formal demography, the knowledge of what was going on around the world in terms of planning and policy, as well as the survey work that Charlie and Norm were doing. You learned a lot by just having coffee there, so to speak. And people spent a lot of time there; you tended to do lots of your work there. So it became clearer to me that that was the direction I was going, even though as I said there was always some openness in my mind as to exactly what path I would choose.

The Michigan connection came about through a visit Ron Freedman paid to Ansley. Ron, of course, by 1962 had started work in Taiwan and run the Taichung experiment with Barney Berelson. In 1964 Taiwan had started a national family planning program and Ron was going to be studying that and its development and he was looking for somebody to work with him particularly in that area and he asked Ansley whether there were any graduate students that might be interested, and Ansley said, "Well, you ought to talk to Al. This will be a big project and you want somebody who is a little older and has some administrative skills."

**VDT:** Oh, that's part of the reason.

**HERMALIN:** I think so. I wasn't there at the conversation, but I think the fact that I had lived another life besides just being a student and had some awareness of the demands of a large project was part of the discussion.

**VDT:** Of course, you know that Ron Freedman in his interview remembered it as--we were talking about Larry Bumpass at the time--and Larry Bumpass was lured away to Princeton to join the National Fertility Study.

**HERMALIN:** Right.

**VDT:** And Ron said that he told Charlie Westoff, "We have to talk baseball here. You got my prize first baseman; you have to send me somebody in return." And you came.

**HERMALIN:** Well, there was a sense of that. I forget the exact timing. Charlie and Ansley had asked me whether I'd be interested in staying on at Princeton to do some work there. It wasn't clear whether I would work mainly with Charlie's surveys or do some things with Ansley. And I was very tempted to do it. In fact, my feeling was that that would be ideal, to stay a couple of years. I remember Charlie saying, "This would a way to consolidate your work and get out some articles and get in on the ground floor of a survey before you get enmeshed in all the teaching."

**VDT:** Of the National Fertility Study?

**HERMALIN:** I can't remember how it was pitched. In part there was an interest in having me do a number of computer things; there were a lot of new developments in computers and they thought I might want to help direct where that would be going for several projects at OPR, but also to be involved with the National Fertility Study. As I say--I want to be cautious--I can't remember the exact flavor, but there was a discussion, reasonably firm, indicating there was the opportunity to stay on if I wanted to.

And I was very tempted to do that; I thought that would be a very logical thing to do. But I accepted Ron's offer to come out and visit. I remember it was a January day in 1967--actually, it was before that. It must have been earlier, around November 1966, because I went out and I made a 180-degree turn in my thinking. I was very much taken with the Population Studies Center at Michigan. I liked Ann Arbor; I had been there once before. You mentioned my service in the Korean War. When the Korean War broke out, I was at Ann Arbor for the second summer workshop of the Institute for Social Research. I was sent by the Institute of Life Insurance to learn more about survey sampling and survey research, which was then a rapidly developing field. I took the first course Les Kish ever taught in survey sampling, that summer. That's how I met Les and we became good friends. So I always had a warm spot in my heart for Ann Arbor and high regard for the university.

I came out to Michigan not at all convinced that this was the right move, but I certainly felt I ought to go visit. I remember coming back and saying to my wife, "I think we ought to go to Michigan." I'm not sure if it was wholly rational or that I thought it through in great detail. Part of the reason, I think, is that when you're a graduate student--and I was treated wonderfully at OPR--there comes a certain time when you say, "I ought to go out and be my own person." That struck me somewhere in my psyche. So I told Ron I would accept the position at the end of the year.

I can't remember the exact timing. But then Ron said, "Why don't you come to Taiwan, over the Christmas and New Year's break"--I was still a student at Princeton--"to get acquainted with the place and meet some of the people. It would be worth your while. You'd get a head start, even though you're going to go back and finish the rest of your third year." So I went to Taiwan for the first time in December 1966. I remember landing in Tokyo New Year's Eve, December 31st, and luxuriating in a hot bath around midnight. I thought this was an interesting way to spend New Year's Eve!

**VDT:** On your way there?

**HERMALIN:** Yes, on the way to Taiwan. In those days, you landed in Tokyo after a long trip. You had to spend the night in Tokyo and then there was a morning flight from Tokyo to Osaka, to Okinawa, and then over to Taiwan. I remember that flight quite distinctly. We spent about two weeks there and then came back about mid-January. Then I finished up my term and came to Michigan in August of 1967. So there was a fair amount of discussion and involvement even before I finished my third year at Princeton.

**VDT:** May I just ask about Fred Stephan, whom I see was the adviser on your dissertation? He has been mentioned in some of these interviews and he was a biggie back then, I know. What about him?

**HERMALIN:** Fred was in the sociology department, but he also was busy at that time trying to form the statistics department at Princeton. Princeton had very distinguished mathematical statisticians and at that time, at least, it was open whether statisticians should have their own department or be located within math. Fred was very active in that. He taught the methods class and the statistics class. He was a very kind and gentle person, who was very good at making you understand the background and the meaning of the abstract formulations. He was less interested in taking you through formal aspects of each subject but he wanted you to understand what was behind everything; so he was very successful in that.

He had a wealth of experience in different ways. He was one of the people who discovered that one of the census errors occurred because things got punched in one column as against another. I think it related to why there were too many Spanish American veterans in Maine. He figured this out by studying the codebook. He had a very operational view of things. He wanted you to understand that when you're looking at published data you're looking at the end result of a complex operation. You want to be able to trace back through all the steps and not take things at face value.

**VDT:** I did want to ask a bit about your doctoral dissertation, the title of which was "Homogeneity of Siblings on Education and Occupation." What was that? You had a note on it in the Journal of Marriage and the Family, but then you seem to have lost it.

**HERMALIN:** We were talking about the events that shape people's careers in different ways. My going to Michigan and choosing to work with Ron on fertility and family planning was a bit odd in a couple of respects. A paper I had written before I came to Michigan was on mortality. I presented that paper at the American Public Health Association meeting as a graduate student. It sought to trace the effects of mortality on growth rates and age structure ["The Effect of Changes in Mortality Rates on Population Growth and Age Distribution in the United States," Milbank Memorial Fund Quarterly, 1966]. Partially because of my life insurance background and knowing something about life tables and causes of death and morbidity, I always thought I would work more on mortality than anything else if I were to specialize in demography. This is one of these accidents that happen to you.

The dissertation was another example. Because of the breadth of the training at Princeton as a sociologist, I had developed an interest in trying to learn to what extent brothers and sisters end up with similar outcomes in education, occupation, and other social positions, as distinct from personality measures. The counterweight to that, so to speak, was the long literature on birth order, going way back to Galton, hypothesizing that first-born are like this and second-born are like that, etc. If you think about it that always gives you the sense that siblings are quite different, and it seemed to me the challenge was to measure how much do they resemble each other and how important is birth order vis-a-vis resemblance. So my dissertation was really looking at how important is birth order and how important is resemblance.

And the topic was interesting because it was not a usual topic for a person in demography to take up. In fact, Ansley was pushing me to do a dissertation on why life tables were changing in structure over time. But I was a little tenacious; I wanted to do this dissertation and I was interested in the topic. I wanted to develop it further and put it out as a book so I didn't develop it into a stream of articles, as is usually done by a graduate student, because I got busy with Ron's project and got involved with other things. But the ideas behind it have been continued in the work of Bob Hauser and a lot of other people--in work about birth order and family relationships. So the concept that the shared background of sibs is important has become well recognized.

**VDT:** In the same vein with your later work on the importance of contextual variables.

**HERMALIN:** Right.

**VDT:** What were the data for the dissertation?

**HERMALIN:** The data were interesting. One of the things that was frustrating was that once I knew what I wanted to do I had to find data that had information on all the children of a family, and that's not the way they're usually collected. You get data by household and you usually only collect information for those in the household. But I found data from a survey that was done for the New Jersey telephone system. It was part of a study on heart disease and stress, but part of the interview was to ask these people, who were basically over fifty, about all their children and the outcomes of all their children. I was given access to those data. I could not find data any place else.

Later I found that the Institute for Social Research had done a survey on educational determinants that indeed had asked about all children, but they had not coded each child separately and I would have had to go back and retrieve the actual questionnaires and recode them. In those days, it



wasn't the usual way of collecting or recording information, so it was a contest to get those data.

**VDT:** Good. So now we're at Michigan and you've made the big switch not only to Michigan but also into fertility and family planning, which you have been involved in ever since. The Caldwells [John and Pat] say in their book, Limiting Population Growth and the Ford Foundation Contribution [1986], that only you and David Goldberg and the Freedmans, from Michigan, were doing the international work. Is that true?

**HERMALIN:** Yes. The Center, like many centers, was multi-purpose. Two things about Michigan were interesting. I was the first person to come there who was not a University of Chicago graduate, except for Dave Goldberg who had his degree from Michigan. Ren Farley, Paul Siegel, Dudley Duncan, and Ron Freedman, of course, were all Chicago graduates. I sometimes point that out, because these intergenerational flows are interesting. Later, a number of our graduates went off to Wisconsin--another generation and another set of influences. I was to a degree an outsider, the first with the perspectives that came out of Princeton's work. Ren, of course, was doing a lot of work--he'd written his dissertation on aspects of American race differentials. And Paul Siegel was studying occupation and mobility. There was a lot of ongoing work on U.S. issues.

So I and Ron did most of the work on Taiwan. Dave Goldberg also was working on overseas things; he did a survey in Turkey and a survey in Mexico. So there was a mixture of international and domestic work. I think that was part of what Ron negotiated with Ford. Part of Michigan's heritage in population came out of studies of urbanization, going back into the 1930s--McKenzie, Hawley on human ecology, and so on. Ron moved from that background to American fertility and then into international work.

**VDT:** You mean that had something to do with Ford monies going into Michigan?

**HERMALIN:** I mean the population centers Ford supported. As I recall the Caldwells' book, Ford supported a number of centers, but I think they were very good in not trying to prescribe that the work all had to be international. They wanted to see strong population centers develop and people would be free to work on what they liked.

**VDT:** Hmmm. That's not the way the Caldwells put it. They put it that you had to have a less-developed-country focus. And, in fact, they said that's why Pennsylvania didn't get all the money they asked for at first, because it didn't look like they were going to move into that area, or not as likely to as Michigan was.

**HERMALIN:** There had to be at least some international work. That's right. I think the tone of it was that Ron didn't want people to feel that they had to do international work. It's true that Ron was doing it, but it wasn't the case that everybody had to do it or that the people who did not do it would somehow be second-class citizens. The money that Ford gave supported the general infrastructure of the Center and supported a lot of the training we did, but it was not given out, divided up, according to whether somebody was doing American work or foreign work. The funds did a great deal in fostering demographic work per se, and of course fostering international work as a part of that. The difference is just a matter of degree.

**VDT:** Let's talk about your research and your work in family planning program evaluation, which you have stressed, certainly at the beginning of your career; it has now shifted to work on the elderly. You said in your PAA presidential address in 1993 ["Fertility and Family Planning Among the Elderly in Taiwan, or Integrating the Demography of Aging into Population Studies," Demography, November

1993]: "In many ways, family planning research is an integral part of fertility research." I thought of that as a little defensive, because you started in on doing that work at the time when some mainstream demographers were skeptical of what Donald Bogue was doing, and Ron Freedman, and Joe Stycos is somebody else that Bogue said was "one of us." Notestein had been too, of course. Do you think that family planning program evaluation research is now respectable?

**HERMALIN:** Oh, yes. There are two points here I think are important. One is if you pick up a general textbook on evaluation, they often make the point that with evaluation the goal is not to break new ground in the subject matter; it's to use what you know to see whether something is having an effect--either on an immediate goal or a long-term goal--or whether a program is cost-efficient. So there's a sense in which evaluation can be a fairly narrow assessment type of thing.

What I feel quite strongly about in the recent history of demography is that the attempt to evaluate the effect of family planning programs has also contributed a great deal to the field of fertility in general, by forcing us to model the reproductive process in much more detail, in understanding the adoption of contraception, and in separating specific techniques. You can see this in the first book Ron wrote on the Taichung experiment.

**VDT:** Family Planning in Taiwan: An Experiment in Social Change [1969]. He said you were involved in the finishing of that book.

**HERMALIN:** Yes, I came after it was well along but I wrote one chapter and worked on others. If you think of the chapters by Robert Potter on multi-decrement tables. This was a way to study continuation rates and to understand how long people used contraception, but those were also part of developing the general sets of methodologies that have been used in a number of different areas. I sometimes stress in my classes that studying how long a contraceptive is used and the reasons for which it is stopped being used--whether it's a voluntary termination or something that happens; in the case of an IUD whether one expels it, gets pregnant, or whether one takes it out--is very much the same structure as looking at what happens to a marriage. A marriage starts, it can go on, it can end by widowhood, it can end by divorce--the exact same technique.

**VDT:** So you're saying that techniques you use in family planning evaluation can be applied in other fields?

**HERMALIN:** Yes. And the people who were working in family planning were developing techniques that were carrying across and also helping people to sharpen up their thinking about many aspects of fertility. Instead of just looking at fertility as something that is basically counting births, we learned a lot more about breaking down the process. If women adopt contraception while they're breastfeeding, how do we account for the fact that that may not be an efficient time or as useful a time as some other time? So this led to a lot of modeling of the reproductive process and the intervals between births and understanding each of the components, like breastfeeding and amenorrhea, which influence them.

**VDT:** You talk about the people who were doing that, which includes you, of course. You began to do quite a bit of honing of the analysis methods and modeling.

**HERMALIN:** I did some. I guess I would say that there was a lot of synergy across different endeavors. The sort of things that Bongaarts did in breaking down the components of fertility--going back, of course, to the work that Davis and Blake started. Then there was the renewal theory, the sort of work that Jane Menken did. These weren't all necessarily evaluation, but the goal of trying to

understand fertility and measure it and its components quite precisely were all parts of a general enterprise, to which the people who were trying to look at the effects of family planning contributed their share. I may sound defensive in part because there was a time when some people who were very strong proponents of family planning were just asserting, "We ought to do it, without studying it." I guess what I was saying is that those people who took it as a scientific area were contributing to the whole realm of work in fertility and family planning; it was rather seamless, so to speak.

**VDT:** That's a good way to put it. Part of your contributions that I have made out were the multilevel approach to studying fertility, and looking at the context variables, which go back certainly to 1967, when Kingsley Davis was saying, "You have to look at context variables too." ["Population Policy: Will Current Programs Succeed?" Science, November 10, 1967]. Some people perhaps felt that withdrew attention from the actual family planning programs.

You work very often with models in your publications and research. Were you influenced by Ron Freedman? For instance, I very much like his funnel model, which I used for a term paper on French-Canadian fertility from the 1600s on; got an A in it--a marvelous organizing principle. Did he inspire you on that or are you just naturally tuned that way? To have a model up front; some of them rather complex, I must say.

**HERMALIN:** I think there are a couple of things. I think as I also said in my presidential address and as a number of other people have noted, demography tends to attract people who think in terms of breaking things down into pieces and then assessing the way pieces go together. I think people who think that way get attracted to demography and I think that mode of thinking--implicitly or explicitly, depending on where you come from--is part of the training in demography. One of our comparative advantages as a science is that we learn to think in terms of components and pieces and don't mix together things that need to be taken apart and looked at very carefully. So I think a number of us share that and, of course, we exchange specific ideas.

Yes, Ron's thinking about how to model fertility was very influential. Ron is a very good sociologist and knew that one factor was unlikely to account for all the effects. He was a very keen observer wherever he went. He saw all the changes going on in Taiwan and he realized the key question--and the challenge Kingsley Davis put down--was how do you separate what's going on in the society and in the economy from what the family planning program brings explicitly? And he tried to reflect this in his overall views and in the schematics he developed.

I also was influenced a lot by Dudley Duncan, who had developed path analysis--or introduced path analysis, to be more precise, into the social sciences, around that time. I think that key article in AJS was 1965 or 1966 ["Education and Occupational Mobility," with William Hodge, American Journal of Sociology, May 1963]. I did not know that piece until I came to Michigan and was able to interact with Dudley. I was still writing my dissertation, because I came to Michigan so early, and I did a chapter in my dissertation using path models. That became a useful mechanism to me for carrying out some of the things that Ron was suggesting in terms of the theoretical framework. So it was a melding of the ways of thinking about things and using some of Dudley's insights and ways of approaching things as a mechanism to carry them out. I would say both of those were influential.

**VDT:** I like the way in your publications you suggest the economy of using existing data. Of course, you used the World Fertility Survey data, now DHS [Demographic and Health Surveys], and you went back and looked at old KAP [contraceptive knowledge, attitudes, practice] data--at least you were looking for it; I don't know if you analyzed it. Or adding just a few questions to ongoing surveys, as you have suggested in your PAA presidential address. Seems a very economical approach.

**HERMALIN:** I was pleased with that effort of retrieving the old KAP surveys [Hermalin, Barbara

Entwisle, and Lora G. Myers, "Some Lessons from the Attempt to Retrieve Early KAP and Fertility Surveys," Population Index, Summer 1985]. And it grew out of, I think, a nice intersection of how your modeling and your theories then come together with your data needs.

It occurred to us as the World Fertility Survey was dominating so many efforts. People often said when the World Fertility Survey started that there were 500, 600, 700 previous KAP surveys--I forget the number--that had been mounted. And one reason the World Fertility Survey came on the scene was that these were of highly different quality, with different sampling designs, questions and sizes, and that we needed to have a much more standardized approach to get an overall and careful picture of what was happening to fertility around the world, particularly in the developing world. But then it occurred to me and some of my colleagues that it would be a shame if all of those other surveys got lost or were not available.

There were two things. If you think of what happened to demography, there was a time that the census was our stock in trade. And part of being a census is that it's done under government auspices and there are plenty of official hands to oversee its production and its safekeeping. As we were moving more and more into the world of surveys, there was not that same mechanism in place. Who owns a survey; who's responsible for a survey? Very often a lot of these surveys were done by a person who said, "Gee, I'd like to do a survey in some country." They find some colleagues there and get some funding. Usually there's nothing in the award that says you will make these data available; you will safeguard them; you will archive them. So we were concerned that some valuable materials would disappear.

**VDT:** A quick aside. I've got two boxes Jeanne Clare Ridley gave me from the Indianapolis Survey in my closet, right around that corner.

**HERMALIN:** And the other point--to tie into the theoretical point--is that as I and my colleagues were working on multilevel modeling, we realized that some real richness could occur if we could get surveys over time in the same place and then see what would happen to context as well as to the individual behavior. So we were hoping that some of these KAP surveys would become Time 1 data to match with the World Fertility Survey as Time 2 data and start to model things in terms of what happened over time, rather than just take it all at a cross-section. So there was both an interest in preserving these data and also seeing that they potentially could be very valuable for analytic work.

**VDT:** So that was your family planning research. Have you read Lant Pritchett in Population and Development Review ["Desired Fertility and the Impact of Population Policies," March 1994]?

**HERMALIN:** I did.

**VDT:** Arguing what is an old argument. He's claiming that family planning programs have little impact on fertility. It's desired family size that matters and that's influenced by social, economic and cultural conditions. What do you think about that?

**HERMALIN:** Well, I won't go into the technical arguments, some of which . . .

**VDT:** John Bongaarts did in the current issue [September 1994] of PDR.

**HERMALIN:** John Bongaarts and others. I think the analysis is naive along certain lines. I think that the weight of evidence is such that family planning programs in a number of places clearly have made a difference in at least the speed and the rate at which things have changed. I don't think anybody argues that the social and economic aspects are not important. The work in Taiwan was strongly

motivated by that idea. We used the areal data because we could get measures of family planning and social and economic change and test quite directly what Kingsley was saying. That is, I had measures for all these things, and I was able to show that, even after taking into account the social and economic change, the places that had stronger family planning inputs had higher contraceptive adoption and lower fertility.

I think one way or another that kind of work has shown that programs do make a difference. The very careful work that's been done in Bangladesh by Jim Phillips and all the associates there, and a number of other instances, and of course the Taichung experiment per se. One of the things Pritchett, for example, doesn't ever talk about is the research that's done within countries. He's taking very big cuts across countries in a fairly limited way.

I think there's also an irony for those like you and me who go back a long way--one of the things I found kind of ironic is that Pritchett takes as a matter of fact that when people tell us how many children they want that that's a well-thought-through and meaningful number, where in the old days of family planning the big attack was, well, you can't learn anything from these surveys: what people tell you doesn't mean anything. Now the argument is turned around and what they tell you is exactly what they mean.

**VDT:** You have, of course, done a lot of work looking at what they really mean.

**HERMALIN:** Yes. You remember the early attacks on some of the work in family planning: "Well, of course, people will tell you what you want to hear; they want to oblige the interviewer." There was a great denigration of the accuracy or the reliability of those data. And now it's turned around and people take them as perfectly accurate, in order to spin a different kind of story. So there are a lot of interesting ironies there.

**VDT:** Did you influence Barney [Bernard] Berelson and Ron Freedman and Robert Lapham in their family planning effort work?

**HERMALIN:** No, I don't think so. I think that was a plan that Barney first developed to ask whether we can't get some measures of how well programs are functioning so that we can introduce it as a variable across countries. I think that development came mainly from the Population Council and Barney worked with Ron a great deal, and of course Bob Lapham came into the picture and worked with them as well, and Parker [Mauldin] was very interested in that. I was involved only occasionally as a somewhat friendly critic in the way the data were used and analyzed, and sometimes I was a correspondent for countries I knew, as one of their informants.

**VDT:** As you say, you all were feeding into each other's research. You did a review of the Caldwells' book in Population and Development Review [March 1987] and pointed out that the Caldwells said that in some of the population centers that Ford was funding, because they were working in less developed countries, the faculty did not go out to the field so much. Students were sent out there. In several instances, they sounded rather critical that the faculty did not go out to the field and stay, and I gather you didn't go for any length of time. And you sounded rather defensive in your review of their book. You explained that faculty had to stay home to mind the fort, etc.

**HERMALIN:** What I liked about the book and what I think that they did was make clear that there were certain structural differences. People who work in schools of public health, for example, often have the opportunity and are expected to spend long times in the field. People in other kinds of departments, in the schools of science and arts, so to speak, often have a different rhythm.

I did go to Taiwan almost every year at the beginning. I would teach for the whole academic

year and then in May or June I would go out for four or five weeks, sometimes shorter stays. One or another of us went to Taiwan almost every year from when I joined Michigan in 1967 through at least to the mid-1970s or later. So it isn't a matter of fieldwork or not fieldwork. We were working mainly with surveys. We could go out there, help develop the survey or do some training or look at the results or look at things in the field. Then come back, get the data, do some of the processing at Michigan or correspond about problems with Taiwan and work back and forth.

So it depends on the subject matter. I think with Jack and Pat Caldwell, their own style leads them to want to spend a lot of time in the field. They feel that that's the way they absorb the nuances of behavior, and that's perfectly fine and legitimate. I just had a feeling that they were perhaps thinking that should have been the modal way to proceed. But I would argue that for the time, there was so much data to be collected via surveys and via other mechanisms that were also useful. If everybody had gone to the field and conducted community studies in those days would demography be as far developed along certain lines as it is today? I think that's an open question.

I just felt that they may have been pushing a form of research that they are very adept at, that they believe in, with less awareness of other approaches. I think they're right in the sense that one of the things that distinguished Michigan to some extent was its long-term involvement. Ron always said, "We don't want to be a center that's one week in Taiwan and next week we're in Korea and next week we're in Thailand and grabbing some data here, or meeting there." It was a very conscious part of our program that we should develop long-term relationships with the country, with colleagues there, so they could know that we'd be there and that we would be developing a line of research and we would be helping train young staff. And we did that in Taiwan.

As a matter of fact, people used to come and say to Ron or to me, "What kind of contract do you have with Taiwan?" And it would often dawn on us that we had no contract. There was nothing but an understanding that we were interested in working with them. They trusted us to do things in good faith and with good sense. It was nothing more than an understanding that could end at any time. Ron always made clear that the data were theirs; they were basically paying for it; they had lots of control over their direction. If they wanted to talk to us, that was fine.

So we believed it was important to be there, to be in touch. We went; we sent students; we brought people there. But it was rarely an immersion type of stay. I just was suggesting that there is more than one model.

**VDT:** You were saying before we started that you had been earlier this year in Taipei to give that talk at the meeting at the Taiwan Population Center?

**HERMALIN:** Yes, the Chinese Population Association.

**VDT:** So you still have very close ties.

**HERMALIN:** Right. In the last seven, eight years, I've been there every year.

**VDT:** You're still having students coming from different Asian countries to Michigan?

**HERMALIN:** Not as much.

**VDT:** That's what I wanted to ask you. Is it still important that people from less developed countries get training in the U.S.--at centers like Michigan--in demography?

**HERMALIN:** Oh, I think so. That's a complex question; I won't go into it too much because I don't know that I have all the answers. But I would hope that the field in general would think through now

where we are in this area. We have collectively been doing training on the predoctoral level, and to some extent with postdoctoral colleagues, over a long period. I think it's very valuable, particularly for the countries that are now starting to focus on the area, like Vietnam, who want to do a lot of work on their population, or South Africa and other countries in Africa, and perhaps some countries in the Middle East. I think there's still a great need, selectively, to help give a high level of training to people who will go back and become the nucleus of research--and perhaps program administration as well--in the population area.

Now, I think that has to be tempered with the fact that many of the countries that we once worked with now have their own Ph.D. programs, with high-level people who can do a lot of their training there.

**VDT:** Particularly in Asia, you would say?

**HERMALIN:** Particularly in Asia. There are Ph.D. programs in Korea, Taiwan, Thailand, that I'm aware of, and several others. For those, I think what would be more useful would be to think of postdoctoral stays, short visits, collaborations.

Today, with the nature of technology, it's easy to build up a collaboration with somebody where you can both have the same data; you can be in almost constant communication by e-mail or fax, not to mention telephone. So one can work jointly in a way that was very difficult for us in the early years. In the early years, the computers generally were in the U.S. A lot of the countries in Asia didn't have the capability even if they had the knowledge. So it was the sort of thing where you had to bring the data here; sometimes you could bring collaborators for a short stay; and bring results back there. And if you had problems about understanding something, you had to write long memos and wait on the mails. I remember long nights writing up consistency checks from early KAP surveys, sending back questions to Taiwan, waiting a month to get some answers from them as they went back to the questionnaires. Today the potential for working collaboratively in a real way, as equals, is much higher. I would hope that we would capitalize on that to work in a very full partnership. So I see new opportunities at the same time that I see a need for a change--keeping some of the old patterns, but altering them as appropriate.

**VDT:** In your presidential address last year, which was on the elderly . . . By the way, you had "Fertility and Family Planning Among the Elderly in Taiwan"; that was the original title. There wasn't any title in the program--the final program--and you're not the first president who has kept us all in suspense: "What's he going to talk on?" You made a little joke on it yourself: one plus one plus one equals zero--you can't have fertility among the elderly.

**HERMALIN:** Right.

**VDT:** You know that Population Today, PRB's [Population Reference Bureau] monthly, gave you the award for the best title [among presentations at 1993 PAA meeting].

**HERMALIN:** That's right; I liked that.

**VDT:** There you were saying there are new opportunities in demography for research on the elderly, which you are by now six years or so into. Is that because family planning program evaluators might be at loose ends, because the programs are working, contraceptive use is so high, fertility has come down so much in that part of the world? Or is it that you yourself are getting up to that time of life?

**HERMALIN:** I often wonder.

**VDT:** Or the world's population is getting to that time [aging]?

**HERMALIN:** The other version is interesting. I gave a talk once about some of the early work that I did on aging--a brown bag at the Population Studies Center--and I said, "Well, perhaps there's a direct correlation with your own age and the topics you choose." But then most of my audience didn't like that because they all had strange topics for their ages.

**VDT:** I asked Jane Menken that. Remember her PAA presidential address ["Age and Fertility: How Late Can You Wait?", Demography, November 1985] was more or less on women in the middle--the ones who have the elderly parents and the kids still in school--which was exactly where she was.

**HERMALIN:** Right. I think it's perfectly reasonable that your insights into issues--or your intrigue with them in part--grows out of your own life. In my case, two things are worth saying. One, you should know that part of my time these days is spent very much on family planning evaluation, because I'm senior technical adviser to the EVALUATION Project that Amy Tsui is in charge of at North Carolina. This is a very large five-year project on developing new indicators and looking at the methods of evaluating family planning that USAID funded. We just started the fourth year this October. Amy Tsui is the principal investigator and I'm a senior technical adviser.

**VDT:** That's why you're adjunct professor at North Carolina?

**HERMALIN:** That's right. And I'll be spending the winter semester at North Carolina to work more intensively on certain issues that I still would like to pursue in that area. So I've not abandoned it by any means. I think there's a whole story to be told about the history of family planning and family planning evaluation and how it's changed. When I got involved with Amy there was a sense that I was coming back into family planning after some gap, which made it interesting to me.

As best as I can trace it, part of my intrigue with aging first came about out of my concern with fertility issues in Asia. That is, I started to say, well, many of the societies in Asia that I knew something about had these very strong family traditions, very strong expectations that older people and couples would live with their children, so what will happen to those arrangements or what pressures will those arrangements be under if families are reducing their fertility so much? And the limited question that I first started with was could it be that awareness of the fact that this might put in jeopardy some of their cherished family arrangements could be itself a factor for bumping fertility back up? We always have assumed that these things are unilinear and that they'll go in a certain way. But when we get to a point in any society in which fertility is under the control of individual couples there are things that can lead it to go up as well as to continue to go down, as you well know.

So I started with a fairly simple question about fertility and aging. And then, of course, that mushroomed into saying how do we look at aging in rapidly developing Asian societies. These societies are very interesting because they have reduced their fertility very rapidly, commensurately their populations are aging quite rapidly, and these are societies with strong views about family relationships that are quite different than most countries in Europe and North America, in terms of expectations of who you live with when you're older. So as this topic evolved, I saw it in broader terms: as an opportunity to study a very important transformation in its own right. We need to establish benchmarks of what exists now, and start to see how these societies evolve through the transition in their age structures.

So, that's how it came into being and that's where my interest has focused over the last several years. I remain very intrigued by it. There is continuity here with the thinking that Ron Freedman had in another way when Ron pushed for careful studies in Asia as they went through their demographic



transition. He used to say, we can now study in detail what happens to a set of countries that we can only reconstruct in part for the history of the West. He felt that this was a very important historical opportunity. I feel the same way, in a sense, in this aspect of aging. So that's a good part of my motivation.

And also, I think as demographers, I've increasingly become aware that when population was growing fast, very quickly journalists used to say this is the population problem. And I think as I get older and see more variations in demographic patterns you come to realize that there isn't a population problem. There are dynamics in population structures and in vital rates that present challenges and opportunities to societies that they have to cope with, whether it's the size of their labor force or changes in the age structure. Japan worries about too few workers coming along and very low fertility, as does Singapore. And there's a lot of discussion about foreign laborers and immigration--these all get tied together. So there's a whole host of questions that tend to occur, and then sometimes to recede. And as demographers, I think we have to be aware to not treat any problem as the only problem or the one that will remain in existence for all time, but to be sensitive to the fact that these are the demographic environments in which societies have to carry out their work. As demographers we should help societies understand what limitations and opportunities these demographic changes and factors bring to them. So that's the way I prefer to see it.

**VDT:** That feeds right into my bringing up the topic of your putting your demographic research to policy use. You were the first winner [in 1988] of the Robert Lapham Award of PAA, which is given for "contributions that blend research with the application of demographic knowledge to policy issues," as well as "service to the population profession." You've obviously felt that was important. The work in Taichung--well, the Taichung experiment fed right into the establishment of the family planning program in Taiwan.

**HERMALIN:** Yes.

**VDT:** Ron Freedman said [in his interview] that he felt an obligation, of course, to work with the people who were setting up that policy. He didn't feel any divide between them. And that's been your philosophy?

**HERMALIN:** Well, I don't think I start with the premise that I want to do something that's going to change the world or change policy. I don't think I've ever looked for policy issues per se. But, as you say, my previous comments feed into this in a way. I think there is a lot of connectedness between what we do in demography and how societies then use this information to organize programs and the like. I guess my preference is to find interesting and challenging problems that are not trivial, that are not too much a sub-specialty of something; I want the problems to have reasonable scope. And I feel that if they are of reasonable scope, then the policy implications or what they mean will be drawn out and can have influence.

But I have rarely taken my work and said, "This means that the government should set up policy A or organization B or so on." Sometimes when people who are in policy say, "Do you think A or B is a good idea?" I might be able to use existing science to say, "Well, our research shows that . . ." Let me give an example from Taiwan, where in the early days of the program they were making IUDs available to hundreds of thousands of women a year. The question arose: how much effort should they make in going back to women who had used an IUD but gave it up or expelled it or had problems keeping it? They were about to mount a very big campaign of followup. But then because we had designed our research longitudinally, we could show that women once they adopted [an IUD] took care of themselves pretty well. Even if they didn't keep the original IUD, they got another IUD or they went on to another contraceptive on their own. Or if they did get pregnant and they didn't want the

child, they would resort to abortion. So the fertility rate among women who had adopted was very low, which allowed us to say, "Look, since you have limited resources, you'd be wiser to put your money into attracting new users, making them aware of your services, rather than putting a lot of energy into your prior users."

We could use our science and our research to help advise them on decisions, but we were not designing the program for them or saying "Do A, B, C" on any regular basis. We were trying to be useful. We wanted to understand the program and learn what things intersected with it so we could give useful advice.

I like to see research used for making good decisions. But I sometimes worry about the word policy, because there was a time in the heyday of family planning programs and some other issues and concerns about population growth when people would sometimes say, "Well, I want to do policy research; I don't want to do real research; I don't want to do scientific research." And that always bothered me, because first of all, I think there's only one kind of research: there's good research and less good research. And I often would say to people who said that to me, "Look, if you're really going to use this stuff, you certainly want to be sure it's correct. Policy research cannot be second-rate research; there's too much more at stake here." If I make an error in some calculation for some idle project, who cares? If I publish it in a journal, somebody will find it. If I make an error and advise a government to spend lots of money foolishly or waste effort, that's a very serious matter. So, if anything, I want anything connected with policy research to be very carefully drawn and exceptionally well done.

So, yes, I like it when I can deal with a problem and the solution has some implications for policies and programs. But I'm more concerned that it be a worthwhile problem and that it be done right and then the policy will take care of itself.

**VDT:** Good. But you did inspire the PAA's Public Affairs Committee [established June 1979]. You wrote a great piece on that for the newsletter ["Formation of the Public Affairs Committee," PAA Affairs, Winter 1984]. That PAA should be more aware of and monitoring what was going on in Washington, and speak to policy makers. Why was that?

**HERMALIN:** That's a case of self-interest. The story as I recall it was . . .

**VDT:** You found other scientists--the Endocrine Society--were much more on top of what was going on in Washington.

**HERMALIN:** Yes, I did that story.

**VDT:** Yes, I asked you to do it.

**HERMALIN:** I think I mentioned sitting next to Charlie Westoff [at a 1977 meeting of directors of NICHD-funded behavioral and biomedical population study centers].

**VDT:** Yes.

**HERMALIN:** There were several factors. There was the awareness that other societies, particularly the biomedical societies, were doing a lot more. And I felt there was a lot happening in demography and population research that we needed to get across, particularly within the National Institutes of Health where the behavioral side is a very small component. It was important that both the NIH as well as the appropriate congressional people understood what population and demographic research could do.

**VDT:** Plus preserving the money that might flow in this direction.

**HERMALIN:** And a realization that it was in our interest that these things be known. Once I realized that so many decisions were made from groups trying to say why their work was important that it certainly behooved the PAA to make clear the good work that our membership was doing. There was some reticence. I think the PAA at first was very conservative. It was so desirous of being purely a professional association that the idea . . .

**VDT:** Which as you pointed out dated back to the days of Margaret Sanger, who helped found the organization, and she was a birth controller and they weren't going to muddy the pure waters of scientific research with such activism.

**HERMALIN:** Yes. One of the things that crosses every professional organization is the concern that if you seek some public outcome does that mean that people will be taking sides on public issues on which people of good will can differ. So there was always a lot of nervousness that anything along these lines was going to lead us into public stances as an association and be potentially divisive.

All in all, it was a little bit the right idea at the right time. I think we had gotten over that early nervousness; there were enough new people coming into the profession to help us understand that we could go forward without compromising our professional standards. And that led to the willingness to take some chances, as we realized that it was very much in our interest, that as a profession we needed to have a range of data and the availability of funding and the like. So, as I say, it was mainly reviving or planting this idea as we were coming into a stage of maturity where people would take up the idea. I'm very pleased that it happened and that I could play some role in it.

**VDT:** To leap forward and finish up on that. You were very instrumental in recently setting up a public affairs office for PAA, bringing in Anne Harrison Clark, who had been at the Population Resource Center at the beginning--to be, well, is she half-time or full-time now?

**HERMALIN:** She's still part-time.

**VDT:** And another person full-time--she's just left--along with the Association of Population Centers. Etienne van de Walle, the president before you, said you were a very active president-elect in setting that up. He was not; he was still a little skeptical--didn't like to muddy the waters of pure scientific research. But he realized its importance. And you do too, obviously.

**HERMALIN:** Yes. It was kind of a full circle for me, because I helped set up the original committee. I chaired that ad hoc committee [Ad Hoc Committee on the Monitoring of Federal Activities Affecting Demography, formed in March 1978, leading to the Public Affairs Committee, with Anne Harrison Clark as the Washington representative] that made the recommendations. And then when Anne came on board the first time, we were very fortunate to have her and it worked out very well, sharing Anne with another organization [Population Resource Center]. So we knew Anne.

**VDT:** You didn't share her in the beginning. Well, she was hired by Population Resource Center.

**HERMALIN:** Sharing in a sense; she was working there and we were helping to support that activity. We looked for a partner that we felt would have the right stance to initiate that work. Then, as president-elect, there was a need again to look at the structure of the office and what we could afford. And the Association of Population Centers had come on the scene.

**VDT:** Did you help form that, by the way?

**HERMALIN:** No.

**VDT:** I want to go back to the Michigan Population Studies Center. You were the director from 1977 to 87, during which time the budget went up from \$600,000 to close to \$2 million. Did you put it more on the map than it had been, or what?

**HERMALIN:** Well, it did grow. But that was a period of growth for many centers and ours as well. I think the growth came in part because some of the research grants moved from being small and more tentative efforts to larger enterprises as we showed the benefits and need. We were also able to get more core support from the government than we had had before as some of those needs became clearer. There was a need for more computer expertise to move into the new era, for example.

We probably did have some net addition of people over that period which led to their activities being included as part of that portfolio. But it was a period of growth. There was a lot of demand for training and we had money from the Hewlett Foundation for LDC training and we had the Mellon program, a special post-doc program. So there were a lot of different programs coming together. The core support from NICHD for both training and the operation of the Center; research grants; support from Hewlett and from Mellon, which was relatively new. There was a burgeoning along lots of fronts, which I think led to that numbers increase.

**VDT:** Even though Ford monies fell away.

**HERMALIN:** Yes.

**VDT:** Who have been the leading influences on your career?

**HERMALIN:** Depending on the nature of the influence, as I said, Marvin Bressler is a big influence because I think it was his model of a learned and engaging professor dealing with important topics that helped make me decide to go to graduate school and seek a degree and career in academia.

**VDT:** You were looking specifically to be a professor to teach?

**HERMALIN:** Yes. That's another one of the ironies I should get on record. We have talked about the happenstance of how you take one road or another. My image of academia was quite naive. I was working full time and I didn't know a lot about what was happening in academia. But when I took these courses at NYU, my thought was about teaching. I remember saying to my wife, "You know, I'm quite sure I could be a good teacher. I've done enough mentoring and explaining and informal teaching that I think I know how to do it. And it would be fun to go to a small college and teach courses and help young people understand some of the potential in sociology and social research." I really had a vision that was very different than that of an active researcher or a research-type academic career that I ended up with. That, again, was just an accident.

**VDT:** What do you consider more important in your career--the research or the teaching? We haven't talked at all about the teaching.

**HERMALIN:** I think the teaching is very important. I care about it a great deal. I think almost all professors have a kind of love-hate relation with teaching. We hate the relentlessness of it; you have to be there every Monday and Wednesday and Friday, and you have to be ready for it. But I think most

of us--at least, I, once I'm in the classroom, tend to be very happy. I like to engage in the ideas; I like the thought that I'm getting across something useful; I like talking to the students informally as well as in the teaching relationship. So I've gotten a lot of rewards out of teaching, as well as lots of funny stories about what goes on in the classroom.

And, of course, at the Population Studies Center or in an academic environment where you're doing graduate training, a lot of your teaching comes by way of mentoring and working with students on your research, on their research, and seeing them through their dissertation. I looked the other day at my shelf, because I had to find space, and counted up all the dissertations that happened to be in one place and I must have been now on well over 50 dissertation committees. And I've chaired a good many; I've probably chaired as many as anybody in the Pop Studies Center or as many as anybody now in the sociology department. I do take pride in that. I think that's important.

And to me it's also important that a lot of my students were students from developing countries who needed a lot of intensive care, so to speak, and help in the ways in American universities and in the ways of research, which were somewhat newer to them. I felt that was an important contribution. So, I think that's been an important part of my career.

**VDT:** Well, we'll get on to your outstanding students. But now, influences. There was Marvin Bressler who showed you that it might be fun to teach--go into academia.

**HERMALIN:** Right. Then, of course, at Princeton there were a number of very good professors, in terms of the different sociology courses and seminars we had in theory and other topics. But, of course, as a demographer, the important influence was Ansley Coale, because Ansley taught the one-year sequence in population at that time and that was the sum and substance of the formal teaching then. It was our building block, and one couldn't have had a better building block in terms of formal insights into demographic processes and how to think about them than through Ansley. So that was a very important influence.

And it also was important in the sense that Ansley was not only a great formal demographer but he was doing the work on the European historical project. So it wasn't that he was not interested in substantive issues. He was--as I said--always coming in and reporting on new things. He had a very keen appreciation of the research process. He taught us to be skeptical about data--you know, that hallmark of demography of looking carefully at data. It was very well inculcated by Ansley in terms of both what he did and what he taught us. So, you could hardly think of a better grounding in the field.

Which has stood me in good stead. I taught demographic techniques for many years. I used to rotate the graduate course with Ren Farley. A lot of the insights I had into ways to get the material across built on that very good sequence. So that's a very important influence.

And, of course, coming to work with Ron Freedman was very important in my career, both in the sense of joining Ron in a very explicit project in which we were both very much engaged. He was a wonderful person to work with, first, because he treated everybody, including me, with such respect. He wanted me to feel like a full partner in the undertaking. I knew that if I had suggestions that they would be given attention and listened to.

But I also learned a great deal from Ron because he's one of the wisest people you could ever run into. He had great insights into almost everything you did. First in how you handle the complexity of all these relationships and prepare to launch a large project. He was well aware of the snares that arise in the course of research or in the course of negotiations. So you learned a great deal about that aspect.

He was eminently sensible. Of all the things that could be done, he always kept his eye on the important things and didn't get sidetracked in ways that could have been interesting but I think would have been much less productive in the long run, in terms of telling a story. As an example, it was Ron

who realized that since we repeated these KAP surveys [in Taiwan] with some frequency, we could start to give a trend line to what was happening in a developing country and how these things were emerging. That seems obvious--and in one level it is--and yet as Ron said the other day, "I don't know any other country that has developed that body of data and the ability to fashion such a long, continuous series on some very key measures." Those trend articles became very important.

**VDT:** You're speaking of the sequence of KAP studies in Taiwan?

**HERMALIN:** Yes. But that was just something that was his good sense. It wasn't that we went out to do it, but we realized that we had these surveys and it was very important to tell that story in this way. And the fact that Ron was such a good sociologist that the KAP surveys were much more than that. KAP is a misleading title: knowledge, attitudes, and practice about family planning. Many KAP surveys around the world that I know about--and started to collect in that enterprise that you mentioned--were really very bare bones. People learned about the fertility history of the person, and the knowledge, attitudes and practice, but there wasn't too much on all the social and economic dynamics that one also needed to understand. And our surveys became richer and richer over time.

**VDT:** You worked on contextual variables.

**HERMALIN:** And we learned a great deal about what brought women into the labor force and whether they kept the wages themselves or gave money to the family and their relationships with their families. There's a book coming out, supposed to emerge from the Chicago Press just this week, that builds largely on the social and economic data from the surveys.

**VDT:** Which you're involved with, with Arland Thornton.

**HERMALIN:** Yes, Arland is the [co]editor.

**VDT:** Social Change and the Family in Taiwan [Arland Thornton and Hui-Sheng Lin, eds.].

**HERMALIN:** Arland is the major editor on our side of it. It's got plenty of fertility in it, but it's very much a social history of Taiwan, as seen through all of these KAP surveys. One reason we could do such a rich story is because the KAP surveys themselves became such broad studies.

**VDT:** I thought there were going to be two books on the Taiwan experience.

**HERMALIN:** At one time we thought of a second book that would be much more focused on the technical aspects of the fertility change. That's kind of in the abeyance at the moment. This is the one we focused on.

**VDT:** When I interviewed the Freedmans in 1989, there were to be two books: this family book, because Arland was so interested in the family, and then the other one. But the other one is in abeyance.

**HERMALIN:** Yes. I was supposed to do more on that but that collided with the work I was starting on aging. It wasn't clear where all the time and funding would come from for that second book, so we held up for the moment. Arland became involved with Taiwan ten or more years ago and contributed to the depth of the surveys that we did after he got involved. So there have been a lot of important hands in contributing to that wealth of information.

It was a cumulative process. Ron sensed the potential in adding these important dynamics to the questionnaire in order to understand the situation. He had great good judgment in seeing the broad picture and seeing how to get the important components of it accurately, and not going down fruitless paths or paths that might be too narrow. These might be interesting but not productive in terms of some of the larger issues at stake. And, of course, his great knowledge of the survey process--how to think about a questionnaire and how to carry it out and the high standards of quality that are so important to the validity of the results. So, all of those things came out of working with Ron--and lots more too.

**VDT:** Any other influences? Talk about Barbara Entwisle. You've published a lot with her.

**HERMALIN:** Yes, I publish a lot with Barbara. Let me use this as an opportunity to say that one of the things I've enjoyed is working collaboratively with a lot of different people. It makes a lot of the problems that much more attractive and opens up the range of things you can do.

Barbara is an example of somebody that came to Michigan as one of the Mellon fellows, when we had that program from the Mellon foundation. She had her degree from Brown. That was the time that Bill Mason and I were doing work on formal multilevel modeling, and starting to apply that to the World Fertility Survey. We involved Barbara in that work and she became a full partner and participant. Barbara and I have worked on and off on different problems for, I guess, well over ten years now.

**VDT:** You have a number of joint publications, and also with Bill Mason.

**HERMALIN:** I went to a meeting in Bogota, an IUSSP meeting, when I was in charge of the family planning section [chairman, IUSSP Committee for the Analysis of Family Planning Programs, 1978-81].

**VDT:** And there you met her?

**HERMALIN:** No, it was after I came back; Barbara wasn't at that meeting. I was editing the proceedings of that conference [The Role of Surveys in the Analysis of Family Planning Programs, 1982] and I wanted somebody to work with me and turn it around quickly, and Barbara had either just joined us or been there for a while. So she and I edited that book for the IUSSP.

Up to that time, a lot of the questions about the availability of family planning were asked of the respondent: "Do you know of any place nearby" and "how far is it," and things like that. People were asked a lot of questions about the location of things but there was very little obtained independently of the respondent. Barbara and I realized, as we worked through the papers, that that introduced some problems--if somebody wasn't using family planning they might not be able to tell you anything about it; a person who was using a certain method might only be able to tell you about the place that she received that particular method--and that it was very important to collect some information, global data, about the community and about the environment of family planning that did not hinge on what the respondents told you.

So we had an opportunity to work with some people in Thailand who had collected exactly the kind of information we advocated and published a paper with them in Demography [Entwisle, Hermalin, Peerasit Kanuansilpa, and Apichat Chamrathirong, "A Multilevel Model of Family Planning Availability and Contraceptive Use in Rural Thailand," Demography, November 1984]. I think we started to influence the way of thinking about this kind of data--that one needs contextual data along with the individual data.

In Taiwan, technically we had contextual data along with individual data, but I had been doing

analysis in two different streams. I'd been analyzing individual data and then for my family planning evaluation work I had been making use of the small area data from the 360 townships into which Taiwan is divided. I used the social and economic aggregate data along with the family planning data to show--as I said before--the relative importance of family planning vis-a-vis social and economic dynamics. But with the multilevel work, we started to put the two together explicitly. The World Fertility Survey collected some community data and then the Demographic and Health Surveys came along. And I think we had some influence in helping make sure that good data about the family planning and health environment was collected by people who went out and looked at these facilities and measured where they were and did not rely on faulty, or potentially faulty, data based solely on respondents. So that was one line of work that Barbara and I and Bill Mason did to some extent through the 1980s, starting with the World Fertility Survey and moving on to some other contexts. And Barbara and I continue. We gave a paper at the PAA meeting last year [Entwisle, Hermalin, and Zeinab Khadr, "Delivery of Family Planning Services in Rural Communities (Egypt)," presented at the PAA annual meeting, Miami, May 5-7, 1994]. We're in the process of revising that for publication. She's been a very good colleague.

**VDT:** What about some of your outstanding students? You mentioned that you have been on the dissertation committees of over 50--many of them from developing countries.

**HERMALIN:** Yes, many of them from developing countries. I don't know what the proportion would be. I think the people best known in the field whose committees I recall being on would be John Casterline, Rob Mare, Herb Smith, Mark Montgomery--in economics; I was the outside member there--and Judith Seltzer.

It's always fun to work with outstanding students. You learn a lot from working with them and you hope you have something to offer. But very often you're mainly serving as a facilitator of their ideas or helping them over a few rough spots. They generally know what they're doing. I was thinking about this and I think there's a difference. When you have a very strong student who knows where he or she is going, there's a saying that the best you can do is stay out of their way. But with every student, you hope that you're making some contribution, facilitating their progress and helping them learn the ropes. And, of course, in other cases you're often doing much more explicit teaching and mentoring and helping them pull things together. Both areas of work are needed and rewarding. So it's fun. With dissertations, you usually get immersed enough in the topic that you learn a lot.

**VDT:** Have most dissertation topics of the students you happened to mention been data from Taiwan?

**HERMALIN:** No, though I've done a lot of dissertations based on our Taiwan data. One of the contributions of Taiwan has been to generate dissertations of many kinds. John Casterline's was on Taiwan--on the changing pattern of marriage. John Anderson, who went to CDC in Atlanta, did one on the role of education in changing fertility levels but more on the shape of the transition in fertility. Other people studied certain aspects of the program. One of our Taiwanese students, for example, looked at the characteristics of the family planning workers and how much that made a difference vis-a-vis the things that they did in terms of their actual duties. So there was a whole range of work--some of it close to family planning; some it much more general fertility, nuptiality, other aspects of the area. We used to keep track of how many dissertations came out of Taiwan; it was an impressive number but I can't recall it.

**VDT:** What do you consider your most important publications, and why? Now, you've coauthored almost all your publications--an enormous number.



**HERMALIN:** Let me preface the answer to that. Part of the joy of being an academic is problem-solving. You have to like to solve problems and research is, to me, a problem-solving activity. And the problems come in different forms. You can get a short burst of insight that's very exciting. You think you see something and you get very excited about it; it keeps you up at night and you're willing to work through the night or do something equally excessive. Those are a lot of fun and they are part of what you look for as one method of reward of being an academic. That happens too infrequently in these days of being busy on a million things but at times you remember. And I think there have been a couple of things that I enjoyed regardless of their influence on the field that had that kind of impact on me--that I enjoyed, that I felt were important.

And then there are other more cumulative lines of research. I started this work, as you alluded to, on assessing the role of family planning programs vis-a-vis social and economic change. And there's been a long series of articles, or reasonably long, in which I developed this idea or carried it forward, and I think it's had cumulative impact and I'm proud of both the findings and whatever ground it broke. So you care about both things, but they come in different flavors, so to speak, in your own history.

I was very pleased about my dissertation, that we talked about, about the siblings ["Homogeneity of Siblings on Education and Occupation"], because I felt it really was my idea; I dug out the data; I thought it was a very important problem; I was pleased with the techniques I developed to carry it through. It's always been close to my heart, so to speak, regardless of what I've done with it, and I've been pleased to see that some of these themes have emerged--not in any genealogical sense--and have come to be recognized as important.

I'm pleased with the cumulative work I've done in evaluation of family planning. I think I helped at the time when I edited some of those books that you alluded to--the one with Chandrasekaran [C. Chandrasekaran and Hermalin, eds., Measuring the Effect of Family Planning Programs on Fertility, IUSSP, 1975] and subsequent volumes.

**VDT:** You had not long been a member of IUSSP when you edited that book.

**HERMALIN:** Right. That was one of the early clarifications of the field, in terms of saying what are the different methods available to us, how do you understand the basic strategies, and so on. And I developed that in papers in some subsequent UN volumes. We used to have expert group meetings sponsored by the United Nations fertility section. There must have been three of them, every two or three years. They were held in Geneva when Gwendolyn Johnson [Acsadi] was head of the fertility and family planning section at the UN.

Those were interesting because they brought together many of the experts in the field and tried to take stock of what we knew: how do we know whether programs are making a difference; which are our best methods for testing these things. Those were challenging meetings, in which one tried to write broad papers about the state of the field and what was going on. You'll see a few of those on the list [of Hermalin publications], starting in the late 1970s. For example, "Some Cautions in the Use and Interpretation of Regression Analysis for the Evaluation of Family Planning Programs," in the book Evaluation of the Impact of Family Planning Programs on Fertility Sources of Variance [United Nations, 1982]. There were three UN volumes that came out of those expert group meetings that I think were reasonably influential. Another one was "Using Individual and Areal Data in the Evaluation of Program Impact on Fertility," in Studies to Enhance the Evaluation of Family Planning Programmes [United Nations, 1985].

**VDT:** You were the single author there.

**HERMALIN:** I mainly was, on those articles I was doing for the UN. I'm pleased particularly--as we

talked about a moment ago--about being one of the people to have drawn more attention to multilevel analysis and its potential. Certainly, that's not something I did by myself, but I was pleased to help spread the word, so to speak, on that approach.

Among the articles that I particularly remember enjoying was one with Anrudh Jain that came out, with the cooperation of T.H. Sun in Taiwan, as "Lactation and Natural Fertility" [in H. Leridon and J. Menken, eds., Natural Fertility, IUSSP, 1980]. This was done for an IUSSP meeting around 1979, in which Anrudh gave the paper. This was one where there was kind of a flash of insight. The excitement there was the fact that we were modeling what was the effect of breastfeeding and postpartum amenorrhea on the birth intervals in Taiwan for this IUSSP seminar that was going to be held--I think it was in France--and we were using path analysis; I can't remember all the details. Some of the results we were getting didn't make sense in the way we set up these models, and the only way the model would be consistent was if we assumed that breastfeeding delayed or reduced the chance of conception even after a woman resumed ovulation. That was a daring assertion at the time. There was, as far as I know, very little biological evidence of that effect. But it appeared so clearly that that had to be happening if the data were to make sense that we asserted in the article that that's likely to be the case. And I gather at the seminar--I wasn't at the seminar; Anrudh gave the paper--it caused quite an uproar. Then later there was confirmation both from surveys that were able to study the situation prospectively and the biological evidence. So that was exciting. This was one of those papers where there was much more a sense of discovery, where you're saying, "Ah ha! This has to be the solution." Then you get excited and test it out.

So there are times when you come up with that sort of thing. I fondly remember that paper because it was so controversial and yet seemed to pick up adherence over time. Anrudh and I still sometimes send each other little clippings we find that confirm that this was on the right track. And people who work in this area discover this paper sometimes and send me an article and say, "Oh, I came across this; you might be interested in what I'm doing in this area." So a lot more has happened, but we clearly were onto an important topic and I think we did set the right tone, even if we didn't do everything definitively. So you remember that kind of article fondly.

Also working with Anrudh Jain, we did some mathematical modeling of cumulative fertility, again for an IUSSP meeting. It was a London General Conference in the late 1960s or early 1970s [Jain and Hermalin, "Fecundity Models for Estimating Fertility Over the Reproductive Period," Proceedings of the International Population Conference, London, 1969, IUSSP]. We were very pleased with the inherent modeling and I think, again, our approach was later confirmed with more sophisticated work. So you remember those with fondness.

As I say, I think it's a mixture of things. You want to be pleased and engaged with your agenda of research and think it's worthwhile. And within that, you look for things that sometimes are inspiring and get the adrenalin going and keep you going late into the night.

**VDT:** An aside on the IUSSP. You feel it's important? You've been involved in many committees, meetings.

**HERMALIN:** I was pretty active there for a few years; I guess it went into the early to mid-1980s. Let me put it in context. Compared to many international disciplinary associations, I think the IUSSP is a much more real presence, bringing people together for seminars, colloquia, and issuing books. It has a real agenda that serves the field well--particularly in giving opportunities to younger scholars. At the Population Studies Center, as you noted, we work a lot with overseas people, but for many demographers who don't get opportunities to work with people from all over the world certainly the IUSSP serves that purpose, through their committee structures and through their seminars.

And, of course, the General Conference itself. The General Conference can be improved, but as a general conference it is much better structured and better organized than a lot of these international

meetings where some groups come together a year or two before the meeting and try to assign duties and find a place. I think our international meetings are well planned in general and bring out a wide number of people from all over the world. There needs to be quite a bit of fine-tuning on how the content of the meetings is arrived at and how one is selected to give a paper and what appears in the official proceedings. But I think certainly it is a meritorious organization.

**VDT:** Etienne van de Walle thinks [in his interview] that the PAA annual meetings are the important international meetings.

**HERMALIN:** They really are.

**VDT:** He thinks they are far more important than the IUSSP every-four-years conference.

**HERMALIN:** Talk about the PAA, I was just noting with my colleagues yesterday at the board meeting that the proportion of the people attending the PAA meeting that come from abroad is increasing, as best I can tell. I'd be surprised if we don't have 10 percent of the attendance coming from outside the country, besides Canada and Mexico. It has quite an international flavor, not only in the topics but also the number of people involved. The PAA supports a number of our international members to attend and that helps a great deal.

**VDT:** Thanks to you--the increased Mellon and Hewlett support [for that international outreach]. I want to get on to PAA but I do want to ask you that big question: What do you see as leading issues in demography over the years you have been involved and for the future? Can you state that in a sentence or two?

**HERMALIN:** I guess my wisdom, such as it exists, goes back to an earlier thing I said. I think we have to see the population component as a set of interrelated population issues that come forward at different times and in different ways to different countries. And I guess the major implication to me, if you take that as a given, is that there'll always be many issues before us, hitting different countries at different times. We have to get more adept at seeing the world that way. Which means we have to be more efficient in how we collect our data, not to be so single-minded and to see that data have to serve multiple issues and multiple needs. We have to realize that there may be little justification for a separate migration survey or a separate living-standards survey and so on. A lot of these things can be accomplished while improving many goals. That is, if one combines scarce resources you probably can get better data that serve all needs together. And I would hope that the next era of data collection and thinking would move in that direction.

**VDT:** Good point. Now on PAA. Do you remember the first meeting you attended? Here's a list of them. You must have been involved before you went to Princeton because Harriet Presser in her interview--interestingly, Harriet worked with you at the Institute of Life Insurance--said that you encouraged her to go to the 1963 Philadelphia meeting, and that was before you went to Princeton. You went to Princeton in the fall of 1964.

**HERMALIN:** I went to Atlantic City, I know, in 1969. Let's see. There were a lot of constraints in those days. I remember not going to Cincinnati [in 1967]; I forget why that occurred. I once attended a meeting in Princeton; it could have been in 1955.

**VDT:** That was the last PAA meeting at Princeton. How come that might have happened?

**HERMALIN:** Well, because I was working at the Institute of Life Insurance. I was quite active all during my time at the Institute of Life Insurance in the American Statistical Association. And one of my colleagues at the Institute was an economist and we thought that some of the things the population people were doing were relevant and that we should know more about their work. So we took the train down to Princeton, to the 1955 meeting, and just showed up.

**VDT:** I have to make a little aside. My husband and I spent a night of our honeymoon in 1952 at Princeton, because I had a brother there, and his wedding gift to us was a night at the Princeton Inn. I have figured out that it was about two or three days before the PAA had a meeting at the Princeton Inn!

**HERMALIN:** I remember that meeting [of 1955]. It was somewhat of a strange feeling, because we clearly had the feeling that we were outsiders; people wondering why these two people from the insurance industry were there. It was a very small group, as I recall.

**VDT:** There's no attendance given for that meeting [on the list], but it must have been indeed a small group.

**HERMALIN:** I guess that was an omen of what was to come.

**VDT:** What do you remember about your early meetings? You know for sure that you went in 1969 to Atlantic City. The president that year was Otis Dudley Duncan.

**HERMALIN:** When you have just finished being a student, or when you are a student, I guess the main thing is getting to meet people and talk about some of the things going on. I had left Princeton by then, but I think it was planned two years or so ahead, because I remember while I was at Princeton, OPR had some of the responsibility for helping with that.

**VDT:** Yes, indeed. OPR was the closest demographic center to Atlantic City.

**HERMALIN:** So I remember some planning for it while I was at OPR. I may have even gone down once when we looked at hotels. It was a small amount of involvement but there was excitement in setting up the meeting. Other than that, I just remember trying to get to know people and identifying people you had read and things of that sort. I remember it was in one of the big old hotels there--the Traymore or one of those boardwalk hotels that have been demolished. I remember we had time to go swimming because I remember challenging the waves with a few other members. That is about my recollection.

**VDT:** What else do you remember about early meetings? By then you were at Michigan.

**HERMALIN:** The thing that I think distinguishes PAA [meetings], that I hope will continue and increase, is that you quickly felt at home. It was not the kind of meeting where you spoke only to a small handful of people you knew. People were very friendly. It was a relatively small fraternity of people. The numbers built up so quickly [thereafter].

**VDT:** Atlantic City already was 486. Miami, the one just past [1994], was 1,185. Your 1993 meeting, in Cincinnati, to everybody's surprise, was the second largest turnout--1,216.

**HERMALIN:** So it's about tripled in size. Of course, the fact that I've gone to almost every one in that period, means you build up friendships and acquaintances with so many people.

But everybody remarks and I always tell my new students when they're going to their first meeting, "You'll enjoy this; people are very open. Just talk to everybody and by the third meeting, you'll know quite a few people." I think that's a very important aspect of our association. If I went to the American Sociological Association meetings, I will certainly know the population and social demographers, but I could spend many hours of the day at the American Sociological meeting--just because it's so big--and not bump into anybody I know. Whereas, if you developed a kind of demographic measure--how many minutes you have to walk around the registration area or the hallway before you bump into somebody you know or that you want to chat with--I suspect the PAA has a very short time compared to the big meetings of the sociologists or the statisticians or the economists and psychologists. So, as I say, even though the meeting size has roughly doubled or is two-and-a-half times in that period, I think we retain that character. You see a lot of people talking to each other and you don't see so many people who seem to be isolates. That's always been a very pleasant part of the meetings for me.

**VDT:** Do you remember the issues that PAA was involved in in the early 1970s--the women's concerns, the Concerned Demographers, the move to try to get the organization to take political stances, like abortion? Were you involved in any of that?

**HERMALIN:** No, I don't remember that period in detail, except in so far as it intersected a bit with the work of the Public Affairs Committee. That was later.

**VDT:** Let's jump up to the mid-1980s, when you were on the board [1982-85]. Think of the issues then.

**HERMALIN:** Oh, there was the issue of who was going to edit Demography and what kind of journal Demography should be and people having views about that. The issues of where we should hold our meetings and the like. I think there were residual issues of taking stances. There still was the feeling that we should not get drawn into public stances that might be divisive. We were concerned, of course, that everybody would feel welcome wherever we went for our meeting. But things were humming reasonably smoothly, as I recall.

**VDT:** Let's get up to your time. I've already mentioned that Etienne van de Walle said you were very active as president-elect [1992] in setting up the public affairs office. Now on to your year as president [1993]. You instituted some interesting changes in how the meeting program was done. Rather than specific sessions in the Call for Papers, you had specific sessions and general topics in 14 broad categories. Why did you think that was important--to do it that way?

**HERMALIN:** We tried to take a fresh look at the way the program was structured. We started with the knowledge that Etienne [president in 1992] had been very successful in getting lots of sessions into his meeting.

**VDT:** 95--the number was creeping up every year.

**HERMALIN:** Yes, Etienne had many sessions, and we felt that was an important component in increasing attendance. And we were also aware that a large attendance was very important for the financial health of the association. So, I took it as a challenge that we had to get a large attendance. And we were nervous about Cincinnati [the location], so we wanted to get a lot of people on the program.

I had followed the previous arrangement of calling for suggestions and asking whether people

wanted to organize a session. And people sent in their forms and said, "Here's a session I'd like to organize." That was the way the program used to be arranged, building on sessions suggested and then having members submit papers to those sessions. And we [the program committee] realized that that was unduly confining as the interest of the membership was getting broader. It wasn't that these topics weren't important, but to try to tell all the people working on fertility that they had to come up with a paper that fit three or four or five pre-arranged, pre-titled sessions was getting a little bit out of kilter. It didn't make sense, because people would say, "I have a good paper but I can't find where to match it up." We were frustrating the talent of our organization by not having an outlet for people with good papers, saying, "We only want a paper this year if you're going to talk about fertility in southwest Africa" or fertility as it applies to the role of husbands, or whatever. All meaningful, important titles but not necessarily the beginning and end of a topic.

So we toyed with the radical idea of doing away with all pre-arranged sessions and just saying, "You submit papers and we'll organize them for you," and people got a little nervous. So we came up with this compromise and said, "Let's keep the more interesting sessions, where we want to make sure that session exists and where there will be a good cadre of people out there who are likely to have been writing on this topic. Let's have a small number of those. But then let's open it up and just say, 'If you have things to say on nuptiality or labor force or whatever, send us the papers. If they meet our standards of quality we'll organize them and get you a session that makes sense.'"

We were confident that we would still get reasonably coherent sessions, but we didn't believe that we could decide beforehand what those coherent sessions should be. It was a semi-bold experiment. It had all sorts of little logistical niceties. But all in all, it worked out quite well. We had the largest number of sessions up to that time.

**VDT:** 101.

**HERMALIN:** And we had a very good turnout [1,216].

**VDT:** Especially for Cincinnati.

**HERMALIN:** And the most important thing was that we received an overwhelmingly positive response. It clearly was a good direction to go and a sensible step. I don't think we received a single demur.

**VDT:** I have to quote to you what Jen Suter [PAA Executive Administrator at that time] said just last week; I phoned her up. She said, "The best year I had at PAA was the year I worked with Al Hermalin. He is a caring man. He was anxious to have everyone involved in the annual meeting program--especially students. And that is my [Jen's] philosophy too." Was that in part it? Not just to get the bodies there because the more registration fees the more money.

**HERMALIN:** There were multiple motives, obviously. We did take to heart Etienne's advice that you want to have a large number of sessions, and that is a major force in bringing people to the meeting and one always has to realize that. But the main thrust was that we were working with a model that was getting out of kilter.

**VDT:** It must have worked because Dick Udry [1994 president] followed up this year, with even more sessions, and he also had a Call for Papers that just said, Send them all in and we'll put them in these 17 categories--and there were 131 sessions.

**HERMALIN:** We just heard yesterday--the first tentative numbers, they haven't finished yet--that we

might go as high as 139 next year [1995].

**VDT:** That's crazy! How can people do it when there are 10, 12, 15 sessions overlapping?

**HERMALIN:** There is the danger of gridlock. There are two things that are helping. One, some of these papers are done in poster sessions and nothing else goes on. And the poster sessions seem to have worked quite well last year [1994]. The other thing is that we will still try to avoid obvious conflicts, but there will be pressure on people to choose. They'll have a choice of 14 sessions at any given time and that does frustrate one. We do hope by indicating when the given papers are on--and we do insist on having one hotel so that people can hear the first two papers of session one and still catch the last two papers of another session going at the same time--that we are giving more choice.

The problem with this increasing number of sessions and the, hopefully, increasing attendance, is that given the long lead time for organizing meetings [reserving hotel sites], we are locked into the number of days that we can have a meeting. One logical approach if you have this many sessions is to start a day early and reduce the overlap. We just have no choice because we've signed contracts for so many years in advance. So I think we'll have to think that through.

But you learn very quickly. Linda [Waite, 1995 president] reported yesterday, for example, that nobody liked evening sessions. They tried some sessions in the evening and people said, "No, we just want to be with our friends; we want to go out to dinner."

**VDT:** Except for those workshops on Thursday evening.

**HERMALIN:** Yes, some workshops occur. So Linda is saying, "I'm not going to have any evening sessions." So you learn. People did not like not having lunch hours [at 1994 Miami meeting], so there may be a variable lunch hour but there'll be at least a 45-minute break every day, so people can get together and so on. You learn very quickly what works and what doesn't work. The learning curve is very steep and our membership is not bashful and they'll tell us what they want. On the other hand, they seem to respond very positively to the fact that if they send in a paper that's meritorious, it will appear on the program.

**VDT:** And you think in the past that was not always true?

**HERMALIN:** No, it was turned down often because it did not fit. If you had pre-arranged sessions and, let's say, you had four sessions [on a topic] you knew that you could accommodate no more than 20 papers, so if you had 40, 50 papers [on that topic] there was nothing you could do. Sometimes, you formed late sessions.

**VDT:** Harriet Presser [1989 president] did. She said she had them on Saturday afternoon; they were the spillover sessions.

**HERMALIN:** Now we just go all the way through Saturday afternoon for regular sessions. People accept that. The meeting goes from Thursday morning through Saturday afternoon. And Saturday evening--if they're staying over, as many do because of the airline ticketing system [cheaper return tickets if stayover includes Saturday night]--we try to have a social event that people can do together, to get to know each other better. Dick had that boat ride last year [1994] on Saturday night, in Miami.

**VDT:** Oh, he did! [Jean was not at Miami.]

**HERMALIN:** Yes. Knowing that people are going to stay over, we're thinking what can we do, as an association, to plan something that will be fun and interesting and people will get to know each other better. I think we'll have that as a feature as long as the current commitments exist for these durations of meetings and this airline system.

**VDT:** Well, while the sessions are going up and the number of papers accepted is going up, the membership is going down. Let's get onto that painful subject. The interesting thing to me is that in the year [1990] that we shifted to having our own office and the dues went up from \$45 to \$70, the membership went up. It reached its peak at the end of 1990. Everyone had said that with a dues increase, the membership will fall. But it did not. It peaked at 2,752 at the end of 1990. Unfortunately, in your year [1993], it dropped quite a bit. At the end of 1993, it was down to 2,267.

**HERMALIN:** They gave us a number yesterday; it's back to around 2,600 [2,596 as of October 1994].

**VDT:** You think that was because everybody was alerted to the problem?

**HERMALIN:** Yes. There are a number of problems. I think, to put it in context, a couple of things happened. One, as I wrote in PAA Affairs at one time, there was so much happening when we moved to be masters of our own fate: becoming a stand-alone organization, not being served by AStatA [American Statistical Association], and being in the same building as ASocA [American Sociological Association] but really running our own operation. There was a lot to do. And I think probably in the midst of that, there was a bit of slippage. Part of it was that probably we weren't as vigilant in making sure that everybody who gave a paper at PAA was a member. Most associations, unless you're an invited outside guest, say, "This is our meeting and if you want to give a paper you should be a member." I'm not sure we were able to enforce that--not out of any oversight but there was just so much going on in that period. As you said, we were setting up our own public affairs office; we were doing everything.

**VDT:** It was two years later, in 1993, that members dropped most. The office was set up in 1990.

**HERMALIN:** But there was a lot to do. There was a great deal of effort in setting up our own bookkeeping and handling the many details of an association. I think it's premature for me to say what caused the drop and what we need to do to get back, because that's what we're working on very heavily. We focused on this at last May's board meeting and earlier. We were concerned about it. I said to Joan Kahn when I appointed her chair of the membership committee in 1993, "The past membership committees have been very nominal committees; sometimes you try a few good ideas. This is a very different environment; we've got to understand what's going on; we've got to look at the whole machinery." So we were cognizant that it had to get real attention. Dick has certainly made that a major focus of his efforts this year. We have examined our reminder system and we are all writing to lapsed members.

**VDT:** Oh, you are?

**HERMALIN:** It's a big campaign. The board members each have been given names of 50 people in their area who are lapsed that they might know. We've sent 8,000 letters to members of related associations that would give us their membership lists free and we have obtained a couple of hundred memberships out of that.

So there's a very broad campaign going on, both to understand what's going on and to remedy



it. I think the final word will be in six months from now, we'll have a better sense of what happened. I think some of our members were slow to renew and we hope to change that.

**VDT:** They weren't jogged. Let me just put this on the record. Jen Suter did not allow members to lapse for very long; she got after them. And Ina Young [successor to Suter as Executive Administrator] has stepped back from that kind of work. She's even talked about hiring a marketing person to go after lapsed members.

**HERMALIN:** No, the reminders go out.

**VDT:** Reminders, yes, but I meant more than that.

**HERMALIN:** Now we're following up on lapsed members. Dick had things in PAA Affairs to encourage our members to get new members. We're sending applications to centers to make sure that they give out the material very early in the career of new students so that they understand the virtues of membership. So there's a lot going on. Some of it is esoteric bookkeeping in a sense, but real. Jen, yes, I think worked hard to make sure that people renewed. But I think in the accounting system, if I'm correct, that if I lapsed in September and didn't renew till December that for a couple of years the accounting would put in my renewal as of December, rather than as of October 1--saying that you have just not been a member for two months. That caused slippage in that people's normal procrastination was costing us--you were losing two or three months of membership, on average, from people who were procrastinating by not dating them continuously.

What I'm saying is--I don't pretend to know the ins and outs and the final report hasn't been written--but there's a mixture of accounting things to be done, reminders to be done, ways of following up related organizations, showing appropriate groups how wide and diverse the content is of our meetings. We don't capitalize on the fact that--you mentioned the attendance at the PAA meeting, upwards of 1200--we get 40 percent of our membership appearing at a meeting. Probably no other comparable association does that and we should be capitalizing on that. This is an association in which people come to their meetings and they care about the association, and I think that will help us attract new members. There's a lot we have to offer.

By the same token, I think we have to be realistic. We are a second organization for many people. Their primary association is with sociology or economics or health, etc. There's always an interest in trying out something people hear about. They've gotten involved for a time in a population-related project so they say, "Gee, it would be good to join PAA," or they have occasion to give a paper so they join that year. And then they say, "Well, I'm really not going in that direction." I think we have to realize there is always going to be a certain number of people circulating through, because our field touches so many bases so that people will get intrigued and then maybe decide it's not for them. That's legitimate.

What we don't want to do is lose people who think we're not doing something that we are. I remember speaking to somebody who said, "I was a member but I didn't see enough stuff on my area." And I said, "You're not looking; 10 percent of our papers now are in the health area." We have to get out the word. I've been using the beginning of the program that lays out the sessions by topic [Topic Index]. It's a very nice advertising device for us to say, look how broad and diverse our organization is. So I'm hopeful that we will have good things to show. You can say to somebody, look, if you're a gerontologist and you think we have nothing of relevance, look at this.

**VDT:** And you did this program summary?

**HERMALIN:** Yes, when we got done with the [1993] program we decided not only to tell people

what's happening every day but that we would put in a summary of sessions by topics. So, in addition to the usual chronology, another innovation we made is that summary; if you're interested in fertility, here are the eight sessions you could go to. If you want to interest somebody who's in aging, you can show that we do a lot; we have six or seven sessions on aging. That was part of the idea. Once we went to this open forum, then we wanted to find ways that people could easily find their way around the program.

**VDT:** Do you think PAA can rest on its laurels when it gets back up to 2,700 members or should it push ahead?

**HERMALIN:** No. What I gathered yesterday is that for the current set of activities that we are engaged in, we need a base of 2,900 to 3,000 members. That would put us in kind of steady state.

**VDT:** That would be a tremendous leap up. The peak was at the end of 1990--over 2,700. But it had been at about that level since the early 1980s, when it had about 2,500. It went over 2,000 in the early 1970s; it hasn't gotten too much bigger than that.

**HERMALIN:** I think also you have to recognize that demography becomes alternatively a hot and a cool topic, as far as the general press goes. Sometimes you get some movement up and down from that. As I said, we don't yet have the final report on why we went down so fast, but we have turned it around. I would hope that if you get the membership total as of the end of our annual meeting, the membership as of May 1 or late April, you will find it back in the 2,700 range.

**VDT:** You mean this past meeting?

**HERMALIN:** No, the coming meeting [1995]. Don't forget that people are about to get notice that their paper's accepted, along with the notice that says, make sure your membership is in or you're not giving this paper. So that should pick up another couple of hundred.

**VDT:** So it possibly could be up to 2,900?

**HERMALIN:** I don't know that we'll be at 2,900 as of May 1. But I would hope that with all the activities we're doing and the good start we've made and what will happen at the meeting that not too long thereafter we would push close to 2,900.

**VDT:** And that will have a lot to do with reducing the budget deficit, which is another painful thing that has happened recently.

**HERMALIN:** Right.

**VDT:** Which PAA had never had before.

**HERMALIN:** It never had the surplus either.

**VDT:** Well, it had small surpluses in 1991 and 1992.

**HERMALIN:** Yes.

**VDT:** But 1993, it went down by a lot.

**HERMALIN:** Well--how shall I put it? My feeling is that we are an ambitious organization for our size, in certain ways. The membership expects a lot. I'm very pleased that we are very active in public affairs, but for our size we were trying to do a lot in that area. That's a costly operation. We try to be involved with lots of things in terms of maintaining the quality of data. So we have quite a bit of outreach that we feel comes with our responsibility. And getting tooled up for that, getting it underway, has led to higher expenses.

What happens in any organization is that things can go very smoothly and then you can have a lot of headaches. We were very efficient in getting through the transition, being set up under Jen's aegis. She did a wonderful job; kept a very tight rein on the expenses. But then in short order, we had to replace Jen, and she was covering a lot of bases--that was expensive. We had to get a new public affairs operation going and space for that, and so on. So a lot of our existing arrangements needed to be redone all at the same time. And those are very costly.

You can be very fortunate in having the right people at the right time and things go very smoothly. And then when there are transitions, they can be costly. My own view of it is that we have made these transitions--we now know what we can afford, what are the essential elements we need in each of these areas, and we also know the realistic amounts that we can pay and we will now keep those within the bounds that we have set. In the current budget estimated for 1994 there will be a deficit, probably, but much reduced from 1993, and we are hopeful that 1995 will be in balance.

**VDT:** Except that in 1995, you have to get new space, and that will probably be more.

**HERMALIN:** We may save money doing that.

**VDT:** Oh, really!

**HERMALIN:** It's not inconceivable that we can do all of the new space at a lesser cost than the existing pieces of space.

**VDT:** I hope they mentioned yesterday at the board meeting that we need new space also for our archives. We've got to take them out of the Georgetown library.

**HERMALIN:** Yes, we talked about that.

**VDT:** It was a lot of work, your meeting program. Did your very large program committee help a lot?

**HERMALIN:** Oh, yes. You can't get everybody in the same room at the same time. But they accepted the challenge that we should do it a different way; they were willing to put in the time. Generally, each of my program people were one half of a team that went through all the papers that came in under those 14 headings and organized them into sessions. Took responsibility, in most cases, for finding a chair and a discussant for sessions they set up or a chair that would get a discussant.

**VDT:** You must be good at delegating. Some presidents said, "When it came down to the wire, I did it all with the two secretaries in my office."

**HERMALIN:** Well, there's no question I worked very hard on it, in terms of time. Part of my suggestions to the board to restructure the role of the vice-president was based on the experience of that year. Currently, we're asking a great deal of a president and a president-elect--that combination. In the year I was president-elect, it turned out I worked a lot on the public affairs office, as you said. But

you're also preparing the program. You're supposed to be preparing a major presidential address that sums up some piece of your wisdom or the field's wisdom. So you're wearing a lot of different hats. You're also intimately involved--you do go to the board meetings, you are involved with the operation of the organization. And it's very hard to turn your attention to each of these things. So by the time you've locked up the program, say in late December, you've put in a tremendous amount of time--working with your committee and your two secretaries and so on. Then there's all the followup, headaches, of fine-tuning the program in January, or whatever it takes. You're still struggling to get your PAA address done. And then you're worrying about the day-to-day affairs of the association.

**VDT:** And all the rest of your other life.

**HERMALIN:** Not to mention the fact that you have a lot of other duties. So my feeling is that if you want to have a president who can pay attention to both the broader issues of the association as they're occurring and to give some attention to long-range planning, you've got to break this up a little better. And that was the beginning of that report that Karen Mason brought in that led to the view that we should have a first vice-president that works together with the president on the program.

**VDT:** It used to be, of course, that the first vice-president did the program.

**HERMALIN:** Yes.

**VDT:** That's not the idea?

**HERMALIN:** No, we didn't go that route. That was one possibility. Some organizations do that: assume it isn't the president's job to do the program.

**VDT:** That's a very good point. And another innovation of yours was that you actually wrote a President's Column in PAA Affairs. As I wrote you, the constitution says that the president should report directly to the members after his year is up. Sidney Goldstein wrote a 1977 report in PAA Affairs, following his year, but no one else ever had done it. So that was great.

**HERMALIN:** I think it is a desirable practice. Well, depending upon how active the president has been in PAA before his or her election--sometimes they will just have finished serving as a vice-president or board member and be very closely involved, or they might be a little distant from it. So there's a lot for the president to learn, but there are things the president sometimes wants to convey to the membership of what they see as the major dynamics of the association: what we have to be alert to; what we've accomplished; what's still to be done.

In my case, it was partially reflecting on what I learned as well as where I thought we should be going. I had served from 1982 to 85 on the board. I was fairly busy in the interim period with work at the National Academy of Sciences [e.g., chair, Committee on Population, National Research Council, National Academy of Sciences, 1985-89] and other activities. So I was going to meetings and doing my thing, but I wasn't close to a lot of the association happenings. So as I took stock of where we were going, I thought it was good time for me to reflect that stock-taking with the membership and to impress upon them how much we had accomplished. That these had been very big steps, that they were very positive in general, but they were fraught with some problems.

**VDT:** You have stressed the importance of international outreach, as I said earlier, getting more Hewlett and Mellon funding for that. You think that's important, obviously. You said, was it, up to 25 percent of people at the annual meeting come from overseas?

**HERMALIN:** I think it's more like 10 percent--international people at the meetings.

**VDT:** And you feel that's important?

**HERMALIN:** As Etienne said, it has become much more of an international meeting--our association's meeting--by its content; by the fact that so many papers are coauthored with people from overseas, whether or not they're there. Many of them are now there physically as well as there as coauthors. So it's become a very international setting for population, in the issues we raise and the geographic areas we cover. And therefore I think that's why we see more and more international researchers wanting to come. I think that's all to the good. I think it would be unfortunate if population studies in the U.S. would become very parochial, in terms of U.S. concerns. That has not been our direction.

**VDT:** I think you might be more aware of that because of your work being so international.

**HERMALIN:** Right. What I broached to Mellon--and Carolyn Makinson was kind enough to think it was intriguing--was to say that given that we have a good size membership that is internationally oriented, what can PAA do qua PAA in the international setting. From Mellon's standpoint, and from Hewlett's to a certain extent, there is a lot of interest in institution-building in the developing world. Sometimes existing centers, like the Pop Studies Center or others, develop collaborations with a given institution in a given country, in Thailand or Taiwan, or wherever. Other kinds of organizations may also have opportunities to do institution-building, and I was saying that given that there's a growth of population associations around the world, does it make sense for associations to start to connect with each other at that level and to exchange visits and to become aware of each other's programs and content. There are many things we can learn from each other which can strengthen the associations.

At the IUSSP General Conference in Montreal [September 1993], PAA organized a satellite meeting of population association representatives from around the world, with Carolyn Makinson's support, which was highly successful.

**VDT:** Whose support?

**HERMALIN:** The Mellon Foundation. We met and we had a large number of country representatives there. We ended up with close to 30 countries. I want to be conservative in my estimate; I have the count somewhere. Some people caught me afterwards and said, "I couldn't come to your breakfast but I'm interested."

The point is that these associations were doing a number of interesting things. They were well past the initial stage of their development. They're doing things that PAA might take lessons from, and there's a good basis for mutual exchange. For example, in some places the association helps translate more technical documents or more technical findings into policy-oriented implications, or less technical forms, in order to give them to appropriate government ministries. In some places, the association is a very active force for population education in the secondary schools or at other levels.

There's a large array of interesting things going on in terms of the connectedness with government, with the school system, the ways they serve their membership, or the kinds of outreach. I think we can learn from one another by enhancing appropriate contacts and that will add to the capability of all the associations. So I'm optimistic. And one of my actions or recommendations to Dick [Udry] was that we form a new standing committee, a population activities committee, that Mary Kritz is now heading up, which will basically administer these Mellon and Hewlett funds where appropriate, but also help think through how this outreach should be carried forward.

**VDT:** I hope it works. Suzanne Bianchi [in her interview] said a problem was that there was no one looking after those Hewlett and Mellon monies, to see how the outreach could happen.

**HERMALIN:** Right.

**VDT:** So here you have a committee.

**HERMALIN:** Right.

**VDT:** And much of the work of PAA gets done by volunteer committees. I had a question here on what you see as the outlook for PAA. You see it reaching out more internationally, and the member numbers going up. Do you feel that the business and applied demographers are now satisfied, now that they have been bounced up again to be a Committee on Applied Demography? They thought they were downgraded in becoming interest groups [Business and State and Local Government Demography Interest Groups].

**HERMALIN:** I think we're doing reasonably well on that front. I think we always have to be careful--specialization is a fault line for every association.

**VDT:** You said that in your presidential address. You ended up saying: "Specialization is a fact of professional life; for broad-based associations, special interests are fault lines that can lead to rather serious divisions. Our association has been fortunate in resisting these because of our broad interest in population studies, our respect for each other's work, and a strong desire to be cooperative and fair in the management of association business." [Hermalin, "Fertility and Family Planning among the Elderly in Taiwan, or Integrating the Demography of Aging into Population Studies," Demography, November 1993, p. 517.]

**HERMALIN:** I think every association develops a culture. Our culture so far has been that we care about population and the Population Association in broad terms. And I think we formally or informally reinforce that ethos. Of course, there can always be a group that feels they're not quite getting their day in the sun. But I think we've been alert to recognizing people who feel they're not being treated fairly and taking steps, as with the applied demographers or another group, and trying to make sure that they do feel fully welcome and find this an interesting and important outlet for their interests. At any board meeting I've been at where that has come up--and that has been a persistent theme--there has been a great effort to make sure we're not overlooking some group of people. Sometimes we will put together a committee and someone will say, "You know, the people in this specialty, they also know a lot about this and you ought to have such-and-such a person." And we do it.

All we can do is encourage good-faith efforts and encourage our membership to realize that there's more to be gained by being together than being apart. It doesn't prevent them from following their narrower interests and we try to accommodate for that. So I'm hopeful that we will stay one happy family.

**VDT:** Good. That's a wonderful note to end on, and we have no more time, but quickly. What are your future plans? You're staying totally involved, keeping on keeping on?

**HERMALIN:** No, I don't think so. I would like to move, within a year say, to probably half-time involvement in my research. I probably will cut back my involvement with teaching and some committee work and just focus on a couple of parts of the research that I care about, that I want to pursue further. And use that remaining time to do things that have not gotten done in the last 25 years.

**VDT:** How do you manage to keep it all going, so many irons in the fire--all your committee meetings and other commitments?

**HERMALIN:** Yes. Right now, for example, we just got an award at Michigan for a new center on aging. It's called the Michigan Exploratory Center on Aging, with support from the National Institute of Aging. I'm the first director of that center; Tom Juster is associate director.

**VDT:** Who?

**HERMALIN:** Tom Juster, at the Institute of Social Research. He's the principal investigator of the Health and Retirement Survey.

**VDT:** Wow! Can you take that on too?

**HERMALIN:** Well, that's why I want to cut down on other things and have a delimited sphere. I want to help develop that center over the next couple of years, and continue my work on the aging of Asia. And then have some time to read a book or two or do what I want.

**VDT:** Last thing. Did either one of your children go into demography or anything like it?

**HERMALIN:** Well, indirectly. My son is an economist at Berkeley. He has an appointment in the school of business and in the department of economics.

**VDT:** What's his name?

**HERMALIN:** Benjamin. Ben was an undergraduate at Princeton and he worked as a research assistant to Ansley Coale, as an undergraduate; in fact, he took Ansley's course as an undergraduate. I tease the people at Princeton when they put out their alumni list. As far as I know, we're the only father-son combination that has ever taken Ansley's course. I sent them a picture once for their annual report--a picture of Benjamin and me and my granddaughter as a potential third generation. He went to MIT for his graduate work and did not pursue demography. But at Princeton, the undergrads have to do special papers in their last two years and he either did his junior or his senior paper with Ansley. And he had a paper accepted at PAA. One year we both were on the PAA program--I can't remember which year--when he was still at MIT.

**VDT:** What about your daughter; what's she doing?

**HERMALIN:** My daughter, Anne, went to Mount Holyoke, majored in psychology, but has been working in business with the Chubb Insurance Group, in Hartford, as a personal lines manager.

**VDT:** Well, they both obviously have fine role models. Any grandchildren?

**HERMALIN:** My son Ben has two children now.

**VDT:** And your wife? Where did you meet and what is she doing?

**HERMALIN:** I met my wife, Jolene, in New York, while we were both working for the reform Democratic club in the East side of Manhattan in late 1959. She had come to New York some years earlier from Akron, Ohio, after completing her B.A. in English, to work in advertising. We worked together on a local paper the club was putting out as a means of educating the electorate to the issues.

We were married in February 1961 and then moved to Forest Hills in Queens after our son was born in 1962, because we could not find a larger apartment in Manhattan that we could afford. We lived there until 1964, when we moved to the graduate student housing in Princeton as I started my graduate studies. Our daughter was born at the end of July in that year. As I look back, I realize it was only because of Jolene's encouragement that I took what in retrospect was such a big step: giving up a promising career in business for the unknowns of academia, with two small children in tow.

After we moved to Ann Arbor and the children got a little older, Jolene returned to work outside the home, moving into development and fund-raising for the university where she could use many of her skills in writing and organization. Most recently, she became director of development and assistant dean at the School of Music, and she is winding up more than 12 years there this December [1994], since she just announced her retirement.



# Passing of Al Hermalin, a pioneer of population studies

MARCH 4, 2021

I am very sorry to pass along the news that Al Hermalin, Research Professor Emeritus in the [Population Studies Center](#) and the Department of Sociology, passed away on March 2, 2021. He is survived by his children, Benjamin Hermalin and Anne Nemetz. Al played a major role in the life of the Population Studies Center, ISR, and the international social science research community. He was a former director of the Population Studies Center, founding director of the [Michigan Center on the Demography of Aging](#), and president of the [Population Association of America](#).



Albert Hermalin

After graduating from City College of New York in 1949 with a degree in mathematics and statistics, Al served in the U.S. Army and worked in the Division of Statistics and Research at the Institute of Life Insurance in New York City. He conducted his graduate studies at Princeton University, where he received his M.A. (1966) and Ph.D. (1969) degrees in sociology and anthropology.

Al joined the University of Michigan in 1967 with appointments in the Department of Sociology and the Population Studies Center (PSC). He served as associate director of PSC from 1972-1976, as director from 1977-1987, and as interim director from 1990-1991.

It's difficult to overstate the impact that Al had on the field of population studies. Al was instrumental in obtaining major funding for PSC from the National Institute of Child Health and Human Development and the National Institute on Aging. He founded the Michigan Center on the Demography of Aging (MiCDA) and served as its director from 1994-1999, creating an important campus resource for social science research in demography.

During the early part of his career, Al focused on fertility and family planning in developing countries. He led the development of the Knowledge, Attitudes and Practice (KAP) surveys about family planning in Taiwan. Due to the research of Al and his highly collaborative international team, the rapid fertility decline that has now occurred in many nations is more completely understood and better documented in Taiwan than anywhere else in the world.



Later in his career, Al's research shifted to the demography of aging. Al helped develop research on the demography of aging at Michigan and elsewhere, with major funding from the National Institute on Aging. This work was captured in *The Well-Being of the Elderly in Asia* (The University of Michigan Press, 2002), which Al edited. Al synthesized the strands of his research in his 1993 presidential address to the Population Association of America (PAA), cleverly titled "Fertility and Family Planning Among the Elderly in Taiwan." The theme of the address, and of much of Al's work, was that the situation of the elderly was directly related to the decisions they had made about fertility earlier in their lives. Taiwan's dramatic fertility decline in the 1960s, strongly influenced by its family planning programs, affected the social and economic situation of Taiwan's elderly decades later through many channels.

In addition to his election as PAA president, Al's many contributions to the field were recognized in his selection for the PAA's Robert J. Lapham Prize in 1989, and his selection to serve as chair of the Population Committee of the National Academy of Sciences from 1985 to 1989.

On a personal note, Al recruited me to Michigan and the Population Studies Center in 1983, when he was serving as PSC director. He was a very supportive mentor who set a great example in all aspects of his career. He created an intellectually stimulating and supportive interdisciplinary environment in PSC. He was very supportive of his graduate students and collaborated with many of them on his projects. I was especially impressed with the deep collaborative relationship he had with his collaborators in Taiwan. This kind of close international collaboration has long been a hallmark of PSC, and Al played an important role in fostering it. Al and his late wife Jolene hosted many wonderful PSC events at their home, setting a tone of friendship and congeniality that permeated PSC. Al was a great friend and supporter throughout my career, giving me friendly advice and support when I became director of PSC and later director of ISR.



**Al Hermalin at the 2002 PSC Celebration of Hermalin & Freedman Endowment Awards**

Al's impact on demography and population studies will be felt for years to come. During his time at ISR, Al mentored many young scholars, inspiring the next generation in the field of population studies. His philanthropic spirit led him to start the [Al Hermalin Scholar's Fund](#), which promotes continuing education, international collaboration, and interdisciplinary research and training through the use of short-term postdoctoral fellowships and opportunities for collaborative research visits. The impact of Al's commitment to giving back to these scholars is immeasurable. If you would like to make a gift in memory of Al, his family has asked that [donations be directed here](#).

Al was a giant in PSC, ISR, and the demographic community. He was a backbone of the culture in PSC. He was a wonderful colleague, scholar, mentor, and friend who will be greatly missed. Our deepest condolences go out to Ben, Anne, and their families.

Sincerely,

A handwritten signature in black ink, appearing to read "David Lam". The signature is fluid and cursive, with the first name "David" being more prominent than the last name "Lam".

David Lam  
Director, Institute for Social Research  
Professor, Department of Economics  
University of Michigan

# Fertility and Family Planning among the Elderly in Taiwan, or Integrating the Demography of Aging into Population Studies

**Albert I. Hermalin**

Population Studies Center  
University of Michigan  
1225 South University Ave.  
Ann Arbor, MI 48104-2590

Demographers study many things. Indeed, having had the pleasure of working intensively on this year's program, I sometimes have had the feeling that demographers study everything.

The one topic that seems not to have received much attention is how PAA presidents select the topics of their addresses. Accordingly I set out to fill this gap by conducting a survey, some focus group sessions, a few in-depth interviews, and archival research. I carried out trend analyses, multilevel analyses, hazard analyses, and content analyses. No matter how I cut it, it all boiled down to two factors. The first was "Talk about what you know." If you think about it, that may be the most threatening piece of epistemological advice you are ever likely to receive. After deep reflection I came up with a title: "Fertility and Family Planning among the Elderly in Taiwan." I want you to note that you have just received the first empirical proof that  $1 + 1 + 1$  can equal 0. Actually, however, the title is not totally facetious.

As you are well aware we are closing the circle on a demographic revolution that began some 350 years ago. Even the changes within this century have been immense. The dimensions of the changes in fertility, mortality, and urbanization are well known. One consequence is a major shift in age structure, which has greatly increased the proportion of the population at the older ages in the more industrialized countries (and which will continue in these countries), and which is becoming noticeable in many parts of the developing world in correspondence to their ongoing demographic transition.

All projections of population trends for the twenty-first century, however they differ in detail, agree that population aging will occur rapidly across the world. As an example, across 10 projection scenarios developed by Lutz et al. (1991), the minimum rise in the proportion over 60 for Europe and North America is from the current (1990) 12.5% to over 20% in 2050; projections that incorporate more rapid decline in mortality and/or fertility

\* Many of the ideas presented in this paper have grown out of a research project, "Comparative Study of the Elderly in Four Asian Countries," sponsored by the U.S. National Institute on Aging (Grant R37 AG07637). In addition to the specific works cited, thanks are due to John Casterline, Ming-Cheng Chang, Napaporn Chayovan, Paul P. L. Cheung, Bruce Christenson, Lita J. Domingo, John Knodel, Rose Li, Hui-Sheng Lin, Mary Beth Ostedal, and Lindy Williams who have stimulated many insights through our discussions and collaborations. Special thanks to Lora Myers for valuable feedback on earlier drafts and to Ingrid Naaman for overseeing manuscript preparation.

generate proportions as high as one-third. For the less developed regions, the U.N. medium variant projects an increase in the proportion 60 or older from about 7% in 1990 to 12% in 2025. The absolute numbers in this age segment are projected to grow by more than 3% annually over this period (United Nations 1989, Table 2.17).

I would like to share some thoughts with you on the challenges and opportunities to our profession, in terms of both substantive issues and research strategies, as we give greater attention to research on aging in the years ahead. Please note that these are the observations of someone who has spent most of his career on fertility and family planning issues, and has turned to the demography of aging within the last five years. These circumstances always present the danger of "reinventing the wheel," but they also offer the opportunity to see similarities and differences in related subfields. I hope it is the latter that comes across. Specifically, I plan to point up several areas of ongoing population research in which potentially interesting connections can be forged with the demography of aging; to indicate several direct and low-cost expansions of current practices which would greatly enhance our knowledge in the demography of aging and would enrich the research potential; and, finally, to suggest several substantive and methodological arenas in which research on aging may challenge our current ways of thinking. This is obviously a broad agenda; I will be able only to touch on several avenues of continuity and change. I use the word *touch* advisedly because the second major factor to emerge from my research on the genesis of PAA presidential talks was the advice "Keep it short."

## EXPANDING SUBSTANTIVE CONNECTIONS WITH THE DEMOGRAPHY OF AGING

No clear line of demarcation exists between the demography of aging and other aspects of population studies, and it might be worthwhile to dwell briefly on these boundary problems. One of the jewels in the crown of demography is our ability to trace the implications of change onto structure; or, to say it somewhat less grandly, to understand the effect of fertility and mortality rates (and, less formally, of migration) on age composition. In a way that is not true of fertility, mortality, and migration, we *know* the cause of age structure because it is a function of these demographic processes (Coale 1972; Dublin and Lotka 1925). This is true at both the macro and the micro level. Asking why someone aged a year is not a research question; certainly there are important mortality questions centering on why people die when they do, just as there are important issues in the biology of aging, but these are not problems in the demography of aging per se.

To date, the demography of aging has given major attention to fertility and mortality because of their centrality in determining age structure and their rather direct translation into family-level issues associated with population aging, such as the number of potential support providers available to an older person or the likelihood that those in their fifties may have one or more elderly parents as well as children still in high school or college. The study of these interrelationships has been very illuminating. Considerable power remains, because what we have learned about the causes and consequences of fertility and mortality contributes to understanding the potential impacts of an older population. Ron Lee (1992) has traced in an insightful manner a number of the social and economic consequences of population aging. He reminds us, among other things, that increases in the proportion of the elderly are associated with decreases in the proportion of dependents at the younger ages, and with potential savings in school expenses and other costs associated with youth. Though the costs for each end of the age spectrum may differ, the societal offsets that exist can be overlooked in cases such as the United States, where the mechanisms for paying the costs of

children often are quite different from those for paying for needs at older ages. To take a related micro example, lower fertility makes it likely that families can invest more per child, thus producing higher overall levels of education. These in turn can contribute to gains in productivity that help to compensate for a higher dependency ratio.

Our ability to understand the relationships among vital processes and age structure and to incorporate social and economic considerations, such as consumption, productivity, and savings, in a rather formal manner (as in Lee's work), is a major demographic contribution to research on aging. I expect further exciting developments in the coming years. At the same time, however, we appear to be giving less attention to the implications for the older population of migration, marriage, divorce, and other family-level dynamics that occur largely at younger ages.

In our work on the older population in Taiwan I have been struck by the sharp differences in the size and nature of their kin networks, between the so-called mainlanders—the million or so military and civilian Nationalists who migrated to Taiwan from China in 1949 and 1950 in the aftermath of the Chinese Civil War—and the native Taiwanese. An older mainlander male is much less likely than his Taiwanese counterpart to be married, has half the number of children, has far fewer grandchildren, and rarely has a brother or sister residing nearby (Hermalin, Ofstedal, and Chi 1992).

Though this is a special kind of migration experience, it reminds us that the characteristics of migrants in terms of age, marital status, fertility and household composition at time of migration, and later life events, including the degree of family reconstitution, will strongly color the size and breadth of their kin groups. Though generalization is difficult, it is reasonable to expect that for substantial numbers, fewer kin will be available, and therefore greater social and economic support beyond the family will be needed. International migrants to industrialized and industrializing countries currently and in the recent past are often distinct from the population of the receiving countries on many dimensions; therefore the potential for divisiveness in working out social policy is increased. One of the more dramatic demographic numbers, to my mind, is the estimate that between 1990 and 2025 the number of youths age 15–24 will decrease by about 13 million in the more developed countries (with GNP per capita of about \$18,000) and will increase by 360 million in the less developed countries (with GNP per capita of about \$800) (United Nations 1989, Table 2.16; World Bank 1991, p. 182, Table A-2). These numbers have many social and economic implications, not the least of which is the movement of capital and people across national boundaries. The volume of future international migration is difficult to predict, but even if only a small portion of the potential is realized, the eventual impact on the family and kinship status of many future elderly persons can be considerable. Even in the absence of international migration, internal migration patterns can lead to a concentration of the elderly in certain areas, and to a distortion in the availability of services in regard to their needs (Morrison 1990).

In many parts of the world, sharp changes have occurred in patterns of marriage and household formation, in the timing of reproduction, and in the levels of divorce and separation. The causes and consequences of these changes as they pertain to children and the adults involved are studied increasingly by demographers and others, but their implications at older ages have received relatively little scrutiny. Many intriguing questions suggest themselves: What special needs may arise around those who never married and/or remain childless? How will emotional and economic relations between divorced parents and their children and stepchildren evolve as a function of custody and contacts at earlier ages? Cooney and Uhlenberg (1990), among others, are starting to address a number of these issues both at a microlevel—for example, by using the National Survey of Families and Households to investigate the effect of divorce on men's relations with their adult children after mid-life—and by pointing up some of the dramatic aggregate trends. They estimate, as



an illustration, that about half of all women entering old age in 2025 will not be in any marriage (Uhlenberg, Cooney, and Boyd 1990).

A number of specific and general societal level issues are associated with these trends. From a broad perspective, one is asking how some changes associated with certain life transitions impinge on others, what reactions may occur, and how a new equilibrium might be established. It is likely that a substantial rise in the numbers and proportions of older divorced and never-married persons will give rise to new social and economic arrangements to mitigate anticipated problems. Is it also possible that the problems generated by being single or divorced at older ages might lead to societal reconsideration of our family and household formation patterns? Just as we hypothesize and test the assumption that old-age support is a factor contributing to high fertility in some countries, we can conjecture that potential disruptions to large numbers of persons at older ages can be a force for cultural reformulation of marriage and divorce patterns. We face the formal demographic challenge of tracing the implications of fertility, mortality, migration, marriage, remarriage, and divorce rates on the marital status and kin availability of the older population across time and place. At the same time, we must be sensitive to an array of nondemographic factors centering on the nature and strength of relationships, as well as on economic dimensions, that inform the meaning of the emergent demographic patterns and help to shape future societal development.

Although we have made a good start, these considerations suggest that there is ample room for additional research on how patterns of migration, household formation, and marital disruption impinge on the well-being of the elderly along several dimensions.

## MEASURING KEY TRANSITIONS AMONG THE ELDERLY

In addition to studying the relationships between vital processes and structure, demographers (along with others) have been giving increasing attention to the characteristics of the elderly—their physical and emotional health, income and assets, marital and work status, living arrangements, and relations with others. Within this array, demographers are paying special attention to living and support arrangements of the elderly because they view these as highly sensitive to changes in fertility (among other forces), even while they maintain long-standing interest in work and retirement and marital status. Embedded in these interests are the events or transitions that determine the composition of the elderly: from health to disability, from work to retirement, from marriage to widowhood, from living independently to needing support, and several others. Measuring the occurrence and timing of these transitions, studying their determinants, and modeling the interrelationships poses numerous challenges. One obvious challenge is the sheer amount of data needed about current characteristics and relatively recent events, not to mention the relevance of earlier life history.

I will return to the data collection challenge shortly. First let me focus on a type of information that we are less in the habit of collecting, but which I believe will become increasingly important. The onset of retirement or a disability often triggers a change in living arrangements and may call forth an explicit pattern of support arrangements. In these cases, understanding why an older person ended up in a specific residence and who does what for that person may require knowing about decisions reached by a potentially large set of family members, often spanning two or more generations and representing a wide range of marital, economic, and residential situations. We need to know the number and characteristics of these family members, but we also need to know how these factors come to bear on the outcome of a particular situation. It is an empirical question whether the outcomes are predictable on the basis of the more readily measured characteristics of the

relevant persons (e.g., the children's income and education, the size and structure of the sibset), earlier interactions, exchanges, and decisions, and normative expectations of the culture, or whether the outcomes depend more strongly on elements of the current situation and on current negotiations.

A few strategies have evolved for dealing with events of this nature. These include developing classification schemes that distinguish several ways in which the size and structure of the potential support network can affect intergenerational support (see, for example, Spitze and Logan 1990) as well as simultaneous-equation models for studying caregiving within the family, which permit the incorporation of the older person's characteristics along with characteristics of each child (Wolf and Soldo 1988). To my mind, they may not go far enough. If we wish to understand support arrangements, I believe we must recognize the degree of *interdependency* among the providers; that is, the degree to which provision of support requires implicit or explicit coordination and accommodation across potential providers. As an example, contact with parents by mail, phone, and (to a degree) in person costs relatively little and requires little coordination among potential providers. At the other extreme, an event which makes likely the coresidence of an elderly parent with a child raises the question of how the selection is to be made. The decision may be more or less explicit, ranging from a rather formal meeting to reliance on a prior understanding or on prescribed cultural norms about the appropriate child (e.g., the eldest son).

Even in the latter instances, some testing of feasibility under current conditions will be necessary. The child designated normatively or by earlier understanding may not be available or able because of poor health, unemployment, or other factors; thus a review of options becomes necessary. Period effects may generate changes in plans formulated earlier. It would be interesting, for example, to know how many changes in planned living arrangements and in other provisions for intergenerational support have been generated by the rash of early retirement programs in the United States, which are accompanying current corporate downsizing.

In short, I would suggest that if we are to understand the consequences of important precipitating events which occur with high frequency among the elderly, there may be no substitute for actually examining the relevant decision-making process and tracing outcomes in sufficient depth rather than attempting to infer patterns from characteristics of limited relevance. This is true particularly if we wish to monitor the consequences for the potential providers of support, and to take account of exchanges of money and time among siblings consequent to some decision about a change in an elderly parent's living arrangements. Eliciting information about family negotiations and about current and future obligations under various contingencies is not the usual fare of demographic research, but it may become more necessary as we try to develop a clearer perception of family support patterns.

## **METHODOLOGICAL AND DATA COLLECTION CHALLENGES POSED BY RESEARCH ON AGING**

Let me turn now to some of the methodological and data collection issues I see emerging from both the above-mentioned and other trends in aging research. These will range from modest expansions of what we do now to more radical departures, and (in keeping with my own experiences) will slant toward connections and comparisons with the world of fertility research. I also think it useful to make a distinction between research with a specific focus on aging, which may require new methodologies or data collection



strategies, and research in which applications to aging can be a by-product of other endeavors, though the separation is not hard and fast. Let's start with the former.

Researchers have an almost insatiable demand for data. When results are ambiguous, it is natural to call for more data. Although I generally hold that our data collection and methodological appetite exceeds our analytic-digestive abilities, I am quite convinced that addressing many key questions in aging will require a systematic amalgam of many of our data collection techniques.

Many concerns arise from the fact that one often must collect quite a staggering amount of potentially relevant information. Consider just the range of illnesses and disabilities to be covered, the different degrees of attachment to the labor force, details on assets and income, and the variations in economic, physical, or emotional support arrangements. Add to these the need to obtain details on the timing of many occurrences, and you have a glimpse of the data collection quandary facing many investigators. One will want to cover many earlier life events as well. These include the fertility, marriage, and migration histories alluded to earlier, but also involve occupational histories and some knowledge of major exchanges that may have taken place over the respondent's lifetime with children, parents, and siblings. Also keep in mind that often we are seeking this information from a respondent who, because of a physical or cognitive impairment, might not be fully capable of reliably providing the requisite detail. Although these issues may differ more in degree than in kind from those facing other investigations, they justify special attention.

Obtaining this information requires attention to the frequency of contact with the elderly, to the array of people studied, to the type of information obtained, and to the data collection techniques employed. To accomplish many of our study goals, we must add some layers of complexity to what we typically do. Let me elaborate on two of these layers.

First, the household sample survey is certainly one of the most powerful tools developed during the twentieth century. One drawback for many demographic studies, particularly in studying the elderly, is that we have taken the word *household* too literally. We rarely inquire about the characteristics and location of those not in the household. For aging research I think it essential to record the location and some basic characteristics of children, siblings, and parents, and to measure the degree of contact. In effect these are our denominators for further analyses of intergenerational and intragenerational support and exchanges.

The amount of support an elderly person receives can be viewed as a function of his or her needs, the number of potential support providers (including kin, nonkin, and governmental and other services), and the ability and willingness of those potential providers to provide assistance. Each of these components can be refined in several directions to generate interesting social and economic hypotheses, and each presents challenges in measurement, but certainly knowing the potential base of support will be important for almost all testing.

This goal is not particularly difficult to achieve. Even in a relatively high-fertility setting, collecting a reasonable array of data on location, characteristics, and degree of contact is well within the capabilities of current survey research. In the past these data were available sporadically in specialized smaller studies and occasionally through comparative studies, as illustrated in the work of Shanas (1967). But the National Survey of Families and Households (Sweet, Bumpass, and Call 1988), the Health and Retirement Survey, the RAND surveys conducted in Malaysia and Indonesia, the efforts of the International Social Survey Program (Smith 1992), and our own work in Taiwan, among others, are beginning to make this approach more common. I would hope it becomes a standard feature of the work in this field.

The second suggestion is that we begin selectively interviewing members of the older respondents' kin network. After all, intergenerational or intragenerational "relations"

imply, by the very word, degrees of connectedness between two or more parties. Although logically we can learn about this from only one of the participants, we can make gains in reliability and scope when information can be obtained from multiple perspectives. Indeed, when the perceptions of need, degrees of closeness, and lifetime reciprocities and exchanges play such a critical role in what we are attempting to measure, it is doubtful that we will long be satisfied with hearing from only one side. We will encounter problems of design—selecting one child at random, for example, versus all the children for a subsample of households—and problems of privacy—as when multiple interviews are conducted within a household—and of cost, but none are insurmountable. In Taiwan currently we are in the field with a survey that follows up the older respondents from 1989 and interviews all children, regardless of location, in one-quarter of the households, including all coresident daughters-in-law.

These suggestions illustrate but do not exhaust the challenges to our data collection strategies posed by research on aging.<sup>1</sup> These needs, however, should not overshadow the potential for gaining valuable insights into dimensions of aging by use of existing data or by modest expansions of current work.

### **SIMPLE EXTENSIONS OF CURRENT DATA AND METHODS FOR GENERATING INSIGHTS INTO AGING**

Let me suggest how we can adapt existing data and methods to gain insights into dimensions of aging. These steps may be particularly useful in countries where large-scale studies of the elderly are not yet justified, but where benchmarks and general planning are needed.

The first set of suggestions might fall under the heading of a fresh look at “old” or existing data. Older women may not bear children, but they can talk about the children whom they have borne (CEB) and who are surviving. They also can discuss the number and timing of marriages, as requested in many censuses and increasingly in surveys of the older populations.

We have not exploited these data sufficiently as potential guides to past fertility, to testing how well older women report their fertility, and to future patterns of support. I think we have shied away from the possibilities because we came away from our days of studying Brass techniques and other methods of indirect estimation convinced that older women are notoriously poor in reporting CEB. Perhaps we overdid this, however. In reviewing some of this literature I have been struck by Professor Brass’s “no rule” principle: there is no method that functions in all situations and no particular pattern of errors that is general (Brass 1975, p. 4).<sup>2</sup>

In view of the large array of KAP, WFS, and DHS surveys now available and the increasing number of high-quality successive censuses, it is time to revisit this question. In many countries it is possible to trace cohorts of women across surveys, from surveys to censuses, and across censuses. The ages involved depend of course on the detail available and on the timing of the inquiries (e.g., one is not restricted to completed fertility where one has birth histories, as in most surveys). Maxine Weinstein and I have been exploring these comparisons over many combinations of censuses and surveys in Taiwan, and the results are quite encouraging. Between the 1966 and the 1980 censuses, for example, the average difference in CEB reported for women 45–54 and 55+ in 1966 was less than .2, with a mean CEB at the earlier date greater than 5.5.<sup>3</sup> Of course, Professor Brass’s no-rule rule applies here as well: Taiwan may not be at all typical of the reliability with which older

women report CEB, but in these reports we may find more useful data than anticipated. Pay-offs exist in several directions:

1. Most relevant to today's topic is the ability to use CEB estimates from cohorts who have completed childbearing in order to look ahead and anticipate the degree of familial support available to future cohorts of the elderly. These can be very useful adjuncts to planning and policy formation. To use Taiwan as an example again, we project from the 1980 Census reports of CEB and from age-sex projections of the population that women 60 and over will have two fewer children on average in 2015 than in 1990 (from 5.3 to 3.3), but this decline will be much sharper among those 60–69 than among those 70 and over. Knowledge that the most vulnerable of the elderly will not experience a sharp reduction in CEB until after 2015 gives policy planners a useful time horizon for developing new programs (Hermalin and Christenson 1992).
2. Surveys of the elderly population in which we can ask multiple questions and probe about childbearing can be an important means of assessing the reliability of the data obtained from the limited items included in censuses. (Similarly, where earlier fertility surveys exist, this issue would be addressed by tracing cohorts who have largely completed their fertility into later censuses.)
3. Older women's census reports on CEB that prove reasonably reliable can be used to recreate earlier fertility levels, either to fill in gaps or for comparison with estimates based on scanty or incomplete data.

CEB is only one characteristic that can be projected to preview attributes of future cohorts of the elderly. Other "fixed characteristics"—those subject to little change from later adulthood on—include education, place of birth, and location of early childhood residence (see Hermalin and Christenson 1992). Education is perhaps the most enlightening of these characteristics for anticipating societal and policy issues related to future trends in age structure. As part of our Asian project, my colleagues and I have prepared estimates of the educational distributions of the elderly for 1980 to 2020 in five countries (the Philippines, Singapore, South Korea, Taiwan, and Thailand).

The educational trends for men and women and across age groups have implications for the workplace, for gender relations, and for intergenerational relations. Let me give two brief examples. First, on the intergenerational front, the Singaporean experience is instructive: in 1980 fewer than 20% of women over 60 were literate and only about 7% had primary or more education. In contrast, 86% of females 30–34 were literate and 69% had primary or more education. These sharp differences across generations help us to understand the reports of significant tensions between older women and daughters-in-law that have emerged from our focus group discussions and other sources. Looking ahead provides some optimism that this source of friction will diminish, because by 2020, 86% of older women will be literate and 73% will have at least a primary school education (Christenson and Hermalin 1991).

Second, and along the same lines, we can compare the educational attainment of men 65–69 to those 50–54 to simulate what might happen in the workplace as men in the younger group compete for the jobs of those more senior. Large educational discrepancies may serve to push the older cohorts out of the labor market more rapidly.

We can further enhance demographic insights into aging as a by-product of existing research through modest and cost-efficient expansions of existing practices. For example, all representative-sample fertility surveys that collect a household roster as a preliminary to identifying respondents eligible for further interviewing can produce a representative sample of household structures as a by-product. These rosters are potentially valuable data sets for

exploring the living arrangements of the elderly. Such capabilities exist within the WFS and DHS, though not always in a convenient form, and have been used to some extent (De Vos 1985, 1987). In addition, any household survey that contains a roster of residents and their basic characteristics has this capability. This opportunity sometimes is overlooked in the large studies of consumer expenditure, income, and other matters conducted in many countries.

From this simple notion of the by-product, it is a small step to become ambitious and to envision how much more could be learned if one or two rather simple questions were added to our fertility surveys. In Taiwan, for example, we have asked in more than three fertility and family planning surveys spanning more than 13 years whether respondents expected to be supported by their sons in old age. The trends display very dramatically the transformation in thinking that has occurred. In 1973, 51% expected support; by 1986, this proportion had declined to 18%, with sharp gradients by education (Chang and Ofstedal 1991).

Several points on this subject are worth noting, as follows:

1. The trend in these expectations is much sharper than the change in current living arrangements among the elderly. In Taiwan the proportion of the elderly in 1989 living with married children remains high—on the order of 57%. It appears to have declined slightly—from 67%—since 1976 (Hermalin, Ofstedal, and Chang forthcoming, Table 2). Thus the data on expectations might well serve as a leading indicator.
2. If questions of this type are included now in fertility or other appropriate surveys in countries still relatively “young” and at high fertility, they can produce important benchmarks and trend data at low cost. This information will help considerably in tracing and understanding the demographic and socioeconomic transformations of these countries.
3. Questions such as support expected in old age are not really extraneous add-ons to a fertility survey, in view of our belief that support in old age is a prop for high fertility in many cultures. Indeed, the ILO is undertaking a large-scale project to explore the importance of this factor in several higher-fertility countries (Nugent and Anker 1990).
4. Expected future support is only one example of potentially worthwhile questions that can be added to existing surveys and studies to produce valuable insights, conveniently and at low cost, into aspects of aging. To mention one other strategy, questions on whether non-coresident parents are alive and where they are residing can greatly enrich insights into living arrangements from fertility surveys and can generate valuable trends (Weinstein et al. 1990).

In sum, if we have confidence—as we should—in our projections about the future shape of age structures, we can learn a great deal about concomitant social, economic, and demographic changes through low-cost additions to current practices. We should think more explicitly of forging bridges between aging research and other types of investigations.

## **LONGER RANGE IMPLICATIONS OF POPULATION AGING FOR POPULATION STUDIES**

In summary and conclusion, let me say a few things about possible longer-range implications of population aging for our field of population studies. These come under the heading of what we have to offer and what we have to gain.

To start with the most mundane, I believe our careful attention to the accuracy of data and our concern with error will play an increasing role in future aging research. As I have suggested already, the amount and complexity of the data that are often relevant to a given issue are quite daunting. When this fact is combined with potential physical and mental limitations among older respondents, the challenge is obvious.

My experience to date and my instincts suggest that scrupulous attention to definitions of the universe, sampling procedures, use of proxies, response rates, and questionnaire content will be especially crucial in aging research if we are not to be misled by the resulting inferences. The population community is well-positioned to assume leadership here, both in setting high standards for existing practices and in introducing new ways to gain information and reduce error.

A second area of contribution comes from our demographic penchant for decomposing events into component parts. This trait pays off both methodologically, in the way we view problems and analyze data, and substantively, in our ability to see the connections between processes and structure. Again, to pick up on an earlier theme, our understanding of how fertility and mortality determine age structure (and our interest in the relevance of other processes) allows us not only to introduce a variety of factors that otherwise might go unnoticed, but also to propose solutions to "aging" problems that otherwise might be overlooked.

Our collective experience with family planning research and evaluation and with other social programs is another resource that deserves notice. Two components are involved here. First, in some developing countries that are now experiencing low fertility, there is the potential of using program administrators and workers to assume greater responsibility for providing services to the elderly, particularly when the same ministry oversees health and related services for all ages. In more general terms, we know a great deal about the provision of contraceptive services to families. I would be surprised if there was not a good deal of carryover as countries give increased attention to providing new or expanded services to the elderly.

Second, the situation is similar for the research and evaluation side. In many ways, family planning research is an integral part of fertility research. It has contributed significantly to our understanding of fertility levels and trends, and of fertility-related behaviors within households. In a parallel manner I would see considerable potential in our ability to evaluate differential effectiveness across programs designed to serve the elderly, and to understand how community and governmental services intersect with family relations, resources, and responsibilities in contributing to a broader understanding of the well-being of the elderly.

One implication of many of my examples is that a focus on population aging entails a corresponding shift from understanding the causes of vital events to understanding the consequences, for societies and families, of changes in age structure and in the size and composition of potential support networks. The pursuit of these objectives presents an opportunity and a need to strengthen interdisciplinary links with anthropology, sociology, economics, and public health, among others. Interesting connections across disciplines are being forged through the steering and technical committees of large-scale projects such as HRS and AHEAD; these should promote further dialogue.

Though our field has great strength and breadth, due modesty must keep us from asserting that demography is destiny. Demographic factors constitute a set of opportunities and constraints that societies must weigh along with many other conditions in establishing values, norms, policies, and programs.

Neither the Greece of Plato's time nor the England of Francis Bacon's time was "old" in terms of age structure, but Plato writes as follows in *The Republic*:

I enjoy talking with very old people. They have gone before us on a road by which we too may have to travel, and I think we do well to learn from them what it is like—easy or difficult, rough or smooth.

In contrast, in the essay *Youth and Age*, Bacon says,

Men of age object too much, consult too long, adventure too little, report too soon, and seldom drive business home to the full period, but content themselves with a mediocrity of success.

Even if these places were not radically different demographically, they certainly differed on many other dimensions. There is no reason to expect that in the future a society's view of the elderly will be simply a function of age structure and demographic characteristics. One challenge for our interdisciplinary aging research is to contribute our insights and tools to help identify the relevant social changes that lie ahead, and to make sense of them. I am confident that we will rise to that challenge. I am also confident that in tackling the emerging issues in aging research, we will enrich our field theoretically, substantively, and methodologically.

Let me conclude by drawing some implications for our association. Specialization is a fact of professional life; for broad-based associations, special interests are fault lines that can lead to rather serious divisions. Our association has been fortunate in resisting these because of our broad interest in population studies, our respect for each other's work, and a strong desire to be cooperative and fair in the management of association business.

In addition, I would hope that one implication of my remarks is that we have a good deal to learn from one another. Successful aging research, along with many other issues that arise, combines insights from many areas of specialization within population studies and is a potential source of enrichment to many fields. If we keep that in mind, then, by another bit of arithmetic magic,  $1 + 1 + 1$  can add up to more than 3 as we combine our talents in interesting ways.

## NOTES

<sup>1</sup> Other methodological challenges include a greater need for longitudinal data collection strategies to capture the large amount of requisite data, especially the timing of key events, and the need to widen the age span to include those 50 and over in order to understand the dynamics of early retirement and how economic behavior and attitudes may change as people approach retirement.

<sup>2</sup> During Professor Brass's famous seminar, held at CELADE in 1971, after he pointed up the potential problem of memory of CEB, one of the participants asked about the universality of the phenomenon, and asserted that in various examples in Latin America, this situation does not seem to occur. Brass replied that similar experiences had been encountered in some African countries. Citing the "no rule" principle, he said he had shown only the most typical case, and that there were many exceptions (Brass 1975, p. 13).

<sup>3</sup> The age groups presented in the 1966 census were very broad. The 1980 census data, however, were given by single years so that the earlier cohort could be traced over the 14-year period.

## REFERENCES

- Brass, William. 1975. "Methods for Estimating Fertility and Mortality from Limited Defective Data." Occasional publication. Carolina Population Center, University of North Carolina at Chapel Hill.
- Chang, Ming-Cheng and Mary Beth Ofstedal. 1991. "Changing Attitudes toward Old-Age Support in Taiwan: 1973–1985." Population Studies Center, University of Michigan.

- Christenson, Bruce A. and Albert I. Hermalin. 1991. "Comparative Analysis of the Changing Educational Composition of the Elderly Population in Five Asian Countries: A Preliminary Report." Population Studies Center, University of Michigan.
- Coale, Ansley J. 1972. *The Growth and Structure of Human Populations*. Princeton: Princeton University Press.
- Cooney, Teresa M. and Peter Uhlenberg. 1990. "The Role of Divorce in Men's Relations with Their Adult Children after Mid-Life." *Journal of Marriage and the Family* 52:677-88.
- De Vos, Susan. 1985. "Using World Fertility Survey Data to Study Household Composition: An Example of Latin America." Center for Demography and Ecology, University of Wisconsin-Madison.
- . 1987. "Living Arrangements of Older People in Six Latin American Countries." Center for Demography and Ecology, University of Wisconsin-Madison.
- Dublin, Louis I. and Alfred J. Lotka. 1925. "On the True Rate of Natural Increase." *Journal of the American Statistical Association* 20(151):305-39.
- Hermalin, Albert I., Mary Beth Ofstedal, and Ming-Cheng Chang. Forthcoming. "Types of Supports for the Aged and Their Providers in Taiwan." In *Aging and Generational Relations over the Life Course: A Historical and Cross-Cultural Perspective*, edited by Tamara Hareven. Berlin: Walter de Gruyter.
- Hermalin, Albert I. and Bruce A. Christenson. 1992. "Census-Based Approaches for Studying Aggregate Changes in Characteristics of the Elderly." *Asian and Pacific Population Forum* 6(2):35-42, 58-67.
- Hermalin, Albert I., Mary Beth Ofstedal, and Li Chi. 1992. "Kin Availability of the Elderly in Taiwan: Who Is Available and Where Are They?" Population Studies Center, University of Michigan.
- Lee, Ronald D. 1992. "Population Aging and Its Social and Economic Consequences." Institute of International Studies, University of California, Berkeley.
- Lutz, Wolfgang, Christopher Prinz, Anne B. Wils, Thomas Buttner, and Gerhard Heilig. 1991. "Alternative Demographic Scenarios for Europe and North America." Pp. 523-63 in *Future Demographic Trends in Europe and North America: What Can We Assume Today?*, edited by Wolfgang Lutz. London: Academic Press.
- Morrison, Peter A. 1990. "Demographic Factors Reshaping Ties to Family and Place." *Research on Aging* 12(4):399-408.
- Nugent, Jeffrey B. and Richard Anker. 1990. "Old Age Support and Fertility." Population and Labor Policies Programme, International Labor Office, Geneva.
- Shanas, Ethel. 1967. "Family Help Patterns and Social Class in Three Countries." *Journal of Marriage and the Family* 29(2):257-66.
- Smith, Tom W. 1992. "The International Social Survey Program." *American Sociological Association Footnotes* May, p. 10.
- Spitze, Glenna and John Logan. 1990. "Sons, Daughters, and Intergenerational Social Support." *Journal of Marriage and the Family* 52:420-30.
- Sweet, James, Larry Bumpass, and Vaughn Call. 1988. "The Design and Content of the National Survey of Families and Households." Center for Demography and Ecology, University of Wisconsin-Madison.
- Uhlenberg, Peter, Teresa Cooney, and Robert Boyd. 1990. "Divorce for Women after Midlife." *Journal of Gerontology* 45(1):S3-S11.
- United Nations. 1989. *World Population Prospects, 1988*. New York: United Nations.
- Weinstein, Maxine, Te-Hsiung Sun, Ming-Cheng Chang, and Ronald Freedman. 1990. "Household Composition, Extended Kinship, and Reproduction in Taiwan: 1965-1985." *Population Studies* 44(2):217-39.
- Wolf, Douglas A. and Beth J. Soldo. 1988. "Household Composition Choices of Older Unmarried Women." *Demography* 25(3):387-403.
- World Bank. 1991. *World Development Report 1991: The Challenge of Development*. New York: Oxford University Press.