

# **DEMOGRAPHIC DESTINIES**

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

### **Interview with Ronald Rindfuss PAA President in 1991**



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)

## RONALD R. RINDFUSS

PAA President in 1991 (No. 54). Interview with Jean van der Tak during the PAA annual meeting, Radisson Hotel, Denver, Colorado, May 1, 1992.

**CAREER HIGHLIGHTS:** Ronald Rindfuss was born in 1946 and brought up in Buffalo, New York. He obtained his B.A. in sociology, with a minor in mathematics, from Fordham University in 1968 and the Ph.D. in sociology from Princeton University in 1974. He entered Princeton on a National Institutes of Health training grant and from 1971 to 1973 and was a research assistant at the Office of Population Research, working on the 1970 National Fertility Study. From 1973 to 1976, he was Research Associate at the Center for Demography and Ecology and the Institute for Research on Poverty at the University of Wisconsin in Madison, where he wrote with James Sweet the monograph, *Postwar Fertility Trends and Differentials in the United States* (1977). Since 1976 he has been at the University of North Carolina at Chapel Hill, where he is Professor of Sociology (since 1984) and a fellow of the Carolina Population Center. Among other activities, he has served on the Committee on Population of the National Research Council (1989-92), on the Census Bureau Advisory Committee (1983-89, chair in 1985-86), held key posts in the American Sociological Association as well as the PAA, been a consultant to the East-West Population Institute, Social Security Administration, Centers for Disease Control, Rand Corporation, and many other government and private organizations, and served as associate or consulting editor or referee for many professional journals.

Ronald Rindfuss is well known in the population world for his research and publications on the social demography of fertility, particularly in the U.S. but also in Asia, and focused primarily on the adolescent and young adult ages. His latest book is *First Births in America: Changes in the Timing of Parenthood* (with Philip Morgan and Gray Swicegood, 1988). In addition, he is author or coauthor of close to 60 journal articles published from 1973 through 1991, plus book reviews, comments, testimony, etc.

**VDT** [from interview introduction]: Ron was president of PAA last year, 1991. He just missed making it into *Demographic Destinies* [1991], the collection of 49 edited transcripts of interviews with PAA past presidents and secretary-treasurers done for the PAA Oral History Project, and I'm very pleased that he has agreed to this interview, which will be a first supplement to that collection.

Thank you, Ron, for making time for the interview during a meeting that will be easier for you than it was for you last year but I'm sure still very busy.

**RINDFUSS:** It has definitely been busy! I'm looking forward to next year.

**VDT:** You were born and brought up in Buffalo. That's close to *my* hometown, Toronto. We Torontonians think of Buffalo as sort of a suburb. There's very good shopping in Buffalo.

**RINDFUSS:** And we used to go to Toronto quite frequently, as well.

**VDT:** I note that you and your wife Maggie were married in the summer of 1968 after you graduated from Fordham. Did you meet at Fordham?

**RINDFUSS:** No. We met in our senior year at high school. We actually met after we had each made independent decisions to go to Fordham, but we certainly were teased quite a bit once it became clear that we were both going to Fordham.

**VDT:** That seemed a bit too premeditated. And you have two sons, Luke and Rob, one of whom has just turned 20, as you said in that teenage childbearing session yesterday. Is that Luke or Rob?

**RINDFUSS:** That's Luke.

**VDT** [after biographical introduction]: How and when did you first become interested in demography, and particularly in fertility?

**RINDFUSS:** It was during either my freshman or sophomore year in college at Fordham. Like many others of my generation, I was sort of caught up in the excitement and push, if you will, towards mathematics as a result of Sputnik in 1957, when I was in grade school. When I got to high school, I was good in math and everyone, from family members to teachers, was pushing me in the direction of mathematics.

So my first year at Fordham, I was a mathematics major. I was taking eight credit hours per semester in math. I woke up one night dreaming how to solve a differential equation. I thought about it and decided that this was not how I wanted to spend the rest of my dreams. At that time, I was living in a house off campus; one of the housemates was Peter Donaldson.

**VDT:** Ah, that explains why you asked him to introduce you last year [presidential address session at 1991 PAA meeting].

**RINDFUSS:** Peter was roughly two years ahead of me in school and was a sociology major. I was at this point deciding that I did not want to be a mathematics major, and then the next logical question was, well, what should I major in? Peter suggested that sociology was interesting and, in particular, I should take a course in population. He recommended the course that Mary Powers was teaching. I took Mary's course. It was a rigorous course, to put it mildly; she had an enormous amount of analytical material.

**VDT:** Introductory population?

**RINDFUSS:** Yes. In the course, we covered the standard topics: fertility, mortality, migration. And I just found myself fascinated with some of the fertility research we were reading.

**VDT:** As a sophomore you were doing this?

**RINDFUSS:** I believe so; it might have been a junior year course. One of the books we read was the first volume of the Princeton Fertility Study by Charlie Westoff and others [*The Third Child*, 1963].

**VDT:** Larry Bumpass came in on that study later.

**RINDFUSS:** Larry came in with *The Later Years of Childbearing* [1970]. I was impressed with it and from that time on, I was interested in aspects of American fertility.

**VDT:** That was the only course you took as an undergraduate, as you recall?

**RINDFUSS:** In population, yes.

**VDT:** What took you to Princeton?

**RINDFUSS:** Like many other people at the time, I applied to the usual collection of graduate schools, including Princeton, and the ones that were within easy driving distance of New York City I visited. I was just most impressed with Princeton. Not only had I already been aware of the faculty, but it was an absolutely beautiful day the day that we went there.

**VDT:** Princeton does that to people!

**RINDFUSS:** Yes. It was springtime; the flowers were out. My future wife and I both went down there. It was a nice day and I was predisposed to going there anyhow.

**VDT:** And you applied for an NIH training grant, or did they pick you out to get one?

**RINDFUSS:** They picked me out. The way it works is that the training grants are given to universities and then the universities make decisions as to which students are to receive them.

**VDT:** So then you and Maggie were married in August and in September you went to Princeton?

**RINDFUSS:** Correct.

**VDT:** What did she do, by the way?

**RINDFUSS:** At that time, the few years, she was working in the university archives. It was a job that she enjoyed a lot. She was able to learn a lot about the history of Princeton. Princeton had many famous alumni and a lot of their papers were in the archives.

**VDT:** Can you describe a bit what the Princeton ambiance was like at that time? You started work on the 1970 National Fertility Study before it actually went in the field?

**RINDFUSS:** No. Let me answer the ambiance first and then talk about the study. OPR [Office of Population Research] at that time was in a house; it was at 5 Ivy Lane. If you can think of a building as being warm and friendly, it was a warm and friendly building. And when I first got there, everyone fit into this building. While I was there, they branched out into the building next door. We had a good collection of faculty and graduate students.

**VDT:** Who were some of your fellow students?

**RINDFUSS:** Let's see; memory is not one of my best suits. I can think of some: Barbara Anderson was there at the time; Hilary Page was there; Leela Visaria.

**VDT:** Leela, of course. She and Pravin later wrote one of my Population Bulletins [of the Population Reference Bureau, on India]. And who did you work with, your professors? Because Charlie Westoff went off from 1970 to 72 to work on the Commission on Population Growth and the American Future.

**RINDFUSS:** Right. Charlie was commuting. He would spend maybe two days a week at the Office of Population Research and three days a week in Washington, so he was certainly still present at OPR. The main population courses at that time were taught by Ansley Coale; he taught one in the spring and one in the fall. All the graduate students took his courses. Then when I started working on my dissertation, I was working with both Charlie Westoff and Norm Ryder, because by that time Norm

had moved from Wisconsin. Norm came--you're the historian, you probably have a better sense of the date.

**VDT:** In 1971. He came back because of the troubles at Wisconsin. He had, of course, continued to be codirector of the NFS. Your dissertation title was *Measurement of Personal Fertility Preferences*. Did that come from the NFS?

**RINDFUSS:** Yes, it used data from the 1965 National Fertility Study. And, if you remember, at the time fertility in the United States, around 1971, 72, was fairly high. There was substantial debate regarding its level: Is it too high? And was it high because people were having more children than they wanted and somehow were making mistakes--contraceptive failures, in essence--or was it so high simply because people wanted more children than would lead to replacement level fertility? This was the basic question that led to the Commission on Population Growth and the American Future. And there was also controversy surrounding the actual measurement of fertility preferences. You can get different results depending on how you measure them.

**VDT:** Ideal, intended, expected fertility. Yes, Norman Ryder was famous for the articles he wrote belaboring those points.

**RINDFUSS:** So my thesis went into these issues in great detail. And about the same time, while I was doing my dissertation, fertility in the United States was going down fairly rapidly. I took long enough to do my dissertation that I was answering questions that weren't quite as relevant by the time I finished as when I started.

**VDT:** That's right. You finished in 1974. We knew [afterward] that it dropped to replacement level in 1972. Of course, it stole the thunder of the report of the Commission.

**RINDFUSS:** Yes, it did.

**VDT:** And your dissertation too! I was going to ask if you worked with Ansley Coale--obviously, very much.

**RINDFUSS:** Yes, he was the third member of my dissertation committee. He wasn't the most central member because I was using data that Norm and Charlie had collected, but he served as the third member, and a very helpful member.

**VDT:** I can now understand why you quote Norm Ryder often: "The norm in the U.S. is for everyone to get married and have two children as soon as possible," or something to that effect.

**RINDFUSS:** Yes. He was actually writing that when I was a graduate student.

**VDT:** I see. Then what took you to Wisconsin?

**RINDFUSS:** It just seemed like a wonderful opportunity. I had known Larry Bumpass because even though we hadn't overlapped at the Office of Population Research--I believe he left maybe the year I came [1971] or the year before I arrived there [Bumpass moved from OPR to Wisconsin in 1970]--he was still working with Norm and Charlie on the 1970 National Fertility Study. In fact, he played a key role in designing the questionnaire and in the analysis. Through Larry I met Jim Sweet, and Jim had a project that was just beginning which was designed to look at trends in American fertility, using census

and Current Population Survey data. They had an opening for a research associate and asked me if I wanted to go there.

**VDT:** And you went, and published the book, *Postwar Fertility Trends and Differentials in the United States* in 1977--actually a year after you had gone to North Carolina.

**RINDFUSS:** It was a great time in many respects. Officially, my appointment--I was a post-doc in the Institute for Research on Poverty and the other part I was research associate on this particular project--but for all intents and purposes, I had the freedom to look at whatever issues interested me. I didn't have any teaching responsibilities; I didn't have any recruiting responsibilities or administrative responsibilities. It was just wonderful to be able to work full time on research. And, in fact, it was a very productive time in my life as well.

**VDT:** And with an interesting group.

**RINDFUSS:** *Very* interesting group--very strong, relatively young group of social demographers.

**VDT:** Who have, many of them, come out of Princeton.

**RINDFUSS:** Jim Sweet went to Michigan.

**VDT:** Oh, sorry! They all came out of Michigan--the famous cohort of Bumpass, Sweet, Bob Hauser, David Featherman--and they all ended up at Wisconsin.

**RINDFUSS:** Right--by various routes. Bob Hauser went to Brown first; David Featherman and Larry Bumpass went to Princeton first. But fairly quickly, they all assembled at Wisconsin.

**VDT:** In part due to Ryder. He said he took the Michigan people because they were the best. He stole them off for the center which he had begun at Wisconsin. Larry in his interview, as you know, described the relationship that you cemented there as particularly important. He talked often of his feeling of "a national community" of demographic colleagues. Do you feel that too?

**RINDFUSS:** Yes, definitely. Part of the enjoyment of working in this field is the high caliber of its members, both in terms of the quality of their research minds but also there are very nice people that work in the population field. There really is a national community that functions not just at annual meetings like this but through the telephone, letters.

**VDT:** Why do you think that is? Do you think that demography draws a special kind of person?

**RINDFUSS:** Oh, yes; I think we draw very special people. [Laughter] I'm teasing. I don't know why it is. The topics . . . If you think of processes like fertility, mortality, migration, these are fundamental human events that lots of people really care about. Yeah, I think there's selectivity in terms of people who can care about basic human processes.

**VDT:** But sociologists do too. Demographers go beyond that. Most of the leaders are quantitatively oriented also--leaders in the field of demography, like yourself.

**RINDFUSS:** Yes, definitely.

**VDT:** You came out of math. So, there might be something about being sharp enough to be able to do the research plausibly.

**RINDFUSS:** Could be, I don't know. I must say it's just very enjoyable to deal with nice people on a day-to-day basis.

**VDT:** And then what took you to North Carolina?

**RINDFUSS:** A job, basically. That's not a very profound answer, but there was a position open in the department of sociology. It's a department that had a long history of well-known people in the population field--Rupert Vance, for example, one of the earlier PAA presidents--in 1951?

**VDT:** Yes, you're right [PAA president in 1951-52]. Rupert Vance, incidentally, was nominated to be president the year that PAA met at Chapel Hill [1951]. He was nominated from the floor and elected. He was local arrangements chair that year.

**RINDFUSS:** And when I went there, Amos Hawley was there; Krishnan Namboodiri was there; Peter Uhlenberg was there; Dick Udry was there; Jack Kasarda arrived the same year I did. The difficulty in naming names like this is that I know I'm going to leave out three or four very important people. So, my apologies to those whom I've forgotten.

**VDT:** North Carolina is famous among universities offering population studies as having had what John and Pat Caldwell said in their book, *Limiting Population and the Ford Foundation Contribution* [1986], was the first and perhaps the only university-wide population program. At the time the Carolina Population Center was set up in 1966, they said, "A population component existed in 15 university departments" [page 95]. That was in many other departments besides sociology.

**RINDFUSS:** Yes.

**VDT:** And there was a big push to get foreign students to work in family planning programs. And Moye Freymann was director of the Center from 1966 to 74 and he was relieved of his directorship--you weren't involved in all of that--and by the late 1970s, the Caldwells said, "There were many fewer foreign students in population courses at the University of North Carolina, and the Carolina Population Center, under Richard Udry, had become a model of academic respectability and the majority of its work was concentrated on the United States." And that's where you came in.

**RINDFUSS:** Yes. I'm not sure, actually, I would agree with the characterization that the majority of the work was concentrated on the United States. In the late 1970s, there was ongoing work in developing countries as well as work in the United States.

**VDT:** Which, of course, you were doing too, but we'll get to that in a moment. *You* were presumably more concentrated on the U.S., however, and not involved in the AID funding which came in when the Ford Foundation left off and "led to dramatic growth of some programs, especially in North Carolina" [Caldwells, p. 104].

**RINDFUSS:** And the characterization of the North Carolina program as being multidisciplinary is still true today. It's the only program I can think of that involves faculty members from as diverse a collection of departments as we have.

**VDT:** You're talking about the program at the Carolina Population Center?

**RINDFUSS:** At the Center. I'll not attempt to list them all but I can give you an example of the range. The Center has faculty members from obstetrics and gynecology, from maternal and child health, geography, political science, sociology, of course, economics, biostatistics--to name but a few.

**VDT:** That's amazing. Is that, would you say, the outstanding feature of North Carolina in the population world?

**RINDFUSS:** It's certainly a leading feature. I think the outstanding feature is that we have a large number of very good scholars as well. It's not just that they're diverse, but that they do excellent research.

**VDT:** The quality of those--a few of those. I know you're afraid to leave some out.

**RINDFUSS:** I'm not going to name names. There are such a large number of truly outstanding faculty members associated with the Center that I'll surely leave some out.

**VDT:** Now on your research. What prompted your interest in the adolescent and early adult years? In your dissertation, presumably, you dealt with the whole range of childbearing women, and also in your work with Jim Sweet.

**RINDFUSS:** While I was at Wisconsin, I started thinking about the general question of the sociological meaning of age as opposed to the biological or the simple statistical meaning of age. And in conjunction with that, I was also aware of a lot of the work that Norm Ryder had been doing, suggesting that if you look at the trends in American fertility that timing of first birth explains in a statistical sense much of the action in terms of the low point during the Depression, the high point during the baby boom, and then you get the decline in fertility during the 1960s and early 1970s. So, thinking about age and thinking about the particular influence of the first birth, I started doing some work on the one hand looking at the determinants of the timing of first birth and on the other hand I was doing a lot of work looking at determinants of the length of time between births, that is, from first to second, second to third, and so forth.

From there, it was a fairly short jump to recognize the particular importance of the teen years and the early twenties.

**VDT:** You have stressed that first births are more important than first marriage.

**RINDFUSS:** Yes.

**VDT:** You stress the social background to demographic events and changes. I would put you in the same category with Kingsley Davis.

**RINDFUSS:** I'm flattered! [Laughter] He's had such a long, illustrious career.

**VDT:** He pointed out in his great criticism of the World Fertility Survey ["The World's Most Expensive Survey," *Sociological Forum*, Fall 1987] that it didn't collect the social background. And, for instance, you and Jay Palmore and Larry Bumpass had an article ["Analyzing Birth Intervals: Implications for Demographic Theory and Data Collection"] in that same issue of the 1987 *Sociological Forum*, which had that criticism of Kingsley Davis of the World Fertility Survey. You

said that the World Fertility Survey did not get background socioeconomic data. You feel that's important?

**RINDFUSS:** Oh, definitely. For a long time, people in our field seemed to act as if babies just occurred in a vacuum, without paying attention to the social and economic environment in which the mothers and fathers of the children lived. And I think we've been making enormous progress in the last ten or 15 years by paying *much* more careful attention to the social environment and the characteristics of young men and women who are the ones who either have births or don't have births.

**VDT:** On the other hand, you apply very sophisticated statistical methods to the data that *are* available--plumbing deeper and deeper, pulling out layer after layer, it seemed to me, of the data that were there.

**RINDFUSS:** Yes.

**VDT:** That, of course, shows your mathematical bent, combined with your sociological interest. Is it important now to get more detailed background data than possible in the usual national surveys, which you have used *very* well, especially the National Longitudinal Survey of High School Seniors of 1972? And for your book with Jim Sweet, you plumbed all the existing data sources. You mentioned yourself the data tapes from the 1960 and 70 censuses and the 1980 CPS. No, I'm getting that mixed up with your latest book [*First Births in America: Changes in the Timing of Parenthood*, 1988]. Was one reason for the American Teenage Study the fact that there was not enough background data in the existing data sets?

**RINDFUSS:** Yes, definitely. That was part of our interest, and certainly my interest, in doing--or trying to do--the American Teenage Study. [Ronald Rindfuss was codirector of this long-planned, much-anticipated, large-scale study, which was canceled in a barrage of publicity in 1991, after its approval and funding by the National Institute of Child Health and Human Development--a victim of the current extremist conservative political climate in the U.S., as Rindfuss explains here.]

In designing it, we probably spent substantially more time worrying and thinking about the independent variables than we did the dependent variables. That's not to say that we didn't think about the dependent variables and do a good job in designing questions about them, but we wanted to make sure that all the aspects of a teenager's life were covered to the best extent we could. So the design that we had would have allowed us to measure peer group influences, school influences, family influences, friendship influences, as well as community influences.

**VDT:** Yes, in one of your articles you said, "How did teenagers make their decisions about contraception?," and it had to be all the variables that you have just listed.

Now that we're on it, let's ask why it didn't happen--the sad story of the killed-off American Teenage Study--for which, I see, you're still funded through June of this year [1992]. Is there anything one can do, or is it dead?

**RINDFUSS:** It will probably be ten years from now before I know that it's truly dead, but I think the probability of it appearing over the next year or year and a half is really quite low.

What happened? What kind of political processes took place? Part of the story is that in addition to our study there was a study designed to measure adult sexual behavior, and there were some real differences in the need for both studies. In terms of adult sexual behavior, there hadn't really been any national data collected since the Kinsey data set. And the Kinsey data set, I think everyone would acknowledge, is really quite deficient in terms of conventional sampling techniques.

**VDT:** Remind me of the approximate date of the Kinsey work--1950s?

**RINDFUSS:** I think one came out maybe in the late 1940s and the other one came out in the early 1950s [*Sexual Behavior in the Human Male*, 1948, and *Sexual Behavior in the Human Female*, 1953]. And they were convenience samples; they were not probability samples by any stretch of the imagination. So for the adult study, there was a real need simply to know who's doing what with whom. And that need, obviously, was amplified or heightened by the AIDS crisis. With respect to teenagers, we've had a series of studies looking at teenage sexual behavior and teenage contraceptive behavior.

**VDT:** A little aside here. You've not used Zelnik and Kantner studies in any of your publications I've looked at.

**RINDFUSS:** Yes, I've used them in some of my work. As I was saying, for the adolescents there's been a long tradition of collecting data on their sexual, contraceptive, and pregnancy experience. Most of the studies have been females, but we've even had some male ones, including, I think, the last Kantner and Zelnik study.

**VDT:** 1979, yes.

**RINDFUSS:** Our feeling looking at those data sets--that is the national ones, the Kantner and Zelnik data sets and Cycles II, III, and IV of the National Survey of Family Growth--was that while they did a very good job in collecting the dependent variables--sexual behavior, contraceptive behavior, pregnancy histories--they didn't go deep enough for our tastes in terms of the independent variables. You knew relatively little about the families in which teenagers were living; at best you might know whether they were living with one or two parents. Almost nothing about how well they were doing in school, or what grade they were in, or what their ambitions were. Nothing in terms of their peer group influences that I think everyone anticipates would affect adolescent behavior. You knew relatively little about religious influences. You had a question in many of the studies on, "What is your religion?," but you really didn't know what their beliefs were and in many cases you didn't know how important religion was to them. So that's what existed at the national level.

And then there were a whole series of studies that were done in the 1970s and 80s in one or two communities that would provide rich detail for the independent variables, or some of the independent variables I've just described. But you never knew whether you could generalize from one community to another community. So what we tried to do--to use a demographic term--was to marry the advantages of the national studies to the advantages of the local studies.

And it's ironic that what was attacked in our study and what was of concern were questions dealing with the dependent variable, questions dealing with sexual behavior. And those kinds of questions, many of them have been asked for a long time, and while we were being attacked, I knew of at least two other studies that were in the field, with federal money, asking about sexual behavior. So part of the question is: Why us?

I'm not sure I'll ever know all the answers to that. What I *can* tell you is that before we were attacked politically, the adult study was--that is, the study that Ed Lauman, Bob Michael, and John Gagnon had been proposing, at the University of Chicago--their study attracted a lot of attention from people like Representative Dannemeyer from Orange County, California, and Senator Jesse Helms from my state. As near as I can tell, based on what they've said publicly, the political concern centered around asking questions about homosexual behavior. And their concern seemed to be that, on the one hand, asking about it says that's okay, that it legitimates homosexual behavior, and on the other hand, they were concerned that the estimates of the size of the homosexual population might prove to be

higher than the current estimates that are floating around. And if it came out that the homosexual population is bigger than people thought, their fear was that there would be a more potent political force. Now, what happened? Several things happened for us. And here I don't have my notes so I won't give you any real dates.

**VDT:** You've given several good talks on it, so it's on record elsewhere. Okay.

**RINDFUSS:** We had submitted our proposal quite some time ago, several years ago.

**VDT:** Who's "we"? Who are the other co-principal investigators?

**RINDFUSS:** In addition to myself, Dick Udry, Barbara Entwisle, and Peter Bearman were involved in the planning of the study right from the beginning. Over and above that, a lot of colleagues at the University of North Carolina helped. We had a national advisory board that consisted of numerous people that you know and respect, as well as comments and suggestions from a wide variety of researchers across the country.

The proposal that was submitted was peer-reviewed; we received a very favorable score. It went through counsel, and we were in the last stage of working through the budgetary details when a request came from someone, I believe in the House--and here I don't know all the details--asking for details about our study. This in turn prompted the Assistant Secretary of Health and Human Services, James Mason, to ask NICHD to stop--or at least to hold up--funding our study until they could review it.

The review proceeded--to use the old civil rights term--with "all deliberate speed." It took at least a year, if not longer. During that time, we were basically on hold. Then in the spring of 1991, Bernadine Healy was appointed head of NIH. James Mason's office finished the review of our study and passed it to Bernadine Healy. Bernadine Healy reviewed our study, liked it--in fact, praised it in the press. There was a story in the *Boston Herald*, I believe it was, where she was quoted as saying that she had personally reviewed it, she thought it was a very good study and this was the kind of the state-of-the-art study that she wanted to see NIH doing.

It was funded in May 1991. Then in July, Secretary Louis Sullivan was appearing on a talk show, when someone in the audience asked him about our study. I have not seen the show but apparently whoever was in the audience knew a lot about the study, asked some very pointed questions. At which time, Secretary Sullivan said, "Well, I don't know anything about it; I'll find out." The next day there was a newspaper article on the front page of the *Washington Times*, describing what had happened. It had picked out some of the most intimate questions that we were asking and printed them on the front page of the *Washington Times*.

**VDT:** The very conservative *Washington Times*--moonies.

**RINDFUSS:** I remember the next day, waking up, we had the Today Show on and there was Representative Dannemeyer reading our most sensitive questions on national television. And the irony for us was that we had agonized a lot about the phrasing of questions, but even more so, who would be asked the most sensitive questions. And we had elaborate screeners, such that if they hadn't engaged in other kinds of behavior, they wouldn't be asked the most sensitive questions. The youngest members of our sample would not be asked the most sensitive questions. No one would be asked such questions unless we had parental permission. So there were all sorts of safeguards that we tried to build into the system. And then to see someone criticizing our study, and reading the most sensitive questions on national television at a time when young people might be watching, just seemed terribly ironic.

**VDT:** Sad, sad.

**RINDFUSS:** And within about four days, Secretary Sullivan canceled our study.

**VDT:** It had already been approved by NICHD, hadn't it?

**RINDFUSS:** Oh, it had been approved. We received our notice of grant award on May 13th and had been working on it for two months before this happened.

**VDT:** Well, that's sad--such a *notorious* case! Oh, dear. Well, you've said--there's still a great need for it, but in the present political climate . . .

**RINDFUSS:** Yes, there still really is, and increasingly so. I'm sure you're aware of the NIH reauthorization bill, which is now sitting in the House-Senate Conference Committee. That reauthorization bill explicitly says that there is a need for NIH to do research on human sexual behavior, and it says that basically as long as there's a public health need, NIH is authorized to do such research.

**VDT:** Will Jesse Helms cut that out?

**RINDFUSS:** He tried to; he was voted down.

**VDT:** Well, perhaps there's some hope again, indeed. NICHD has funded most of your work. Of course, they have stressed in the past--I've heard Wendy Baldwin speaking about this--using existing data sources. But here, they were going to fund a new survey, just as they have the National Survey of Families and Households. By the way, did you think that, well, "Jim and Larry got their survey; I've got to get mine too"?

**RINDFUSS:** No.

**VDT:** That was just coincidence?

**RINDFUSS:** Yes.

**VDT:** Here they were going to--and *had*, actually--fund something brand new?

**RINDFUSS:** Yes. I think the reason is that it was felt by people both within NICHD and others that the time was right, that we needed to go beyond descriptive studies or the small-scale community studies; that we really needed to have a resource for the entire research community that was rich in independent variables and national in scope. Just like many of the other national studies that are going on, our plan was to release the data to the entire research community just as quickly as we could.

**VDT:** Just like Larry has said, with his and Jim Sweet's National Survey of Families and Households, he opens up the latest journal and wonders who's going to have done what, using their data, because it has been made so widely available. Well, that *is* a very sad thing. What of your Asian studies; what explains them? You have done quite a lot in Asia.

**RINDFUSS:** Right. Early on, there were several streams of my Asian research, and they followed the distinction I was telling you before, between looking at the time of first birth and looking at the

determinants of lengths of birth intervals after the first birth.

In terms of examining the lengths of birth intervals after the first birth, shortly after I had moved to North Carolina I went to a conference at the East-West Center [in Honolulu]. It was actually a conference examining own-children methods, which was a technique that Jim Sweet and I used in the 1977 book. While I was there, I ran into Jay Palmore, whom I'd met three or four years earlier. We just started talking. I was showing him some results that Larry and I were obtaining in the United States, and he was telling me about some data and interests that he had had in looking at similar issues in Malaysia. So one thought led to another and we said, "Well, it really would be nice if we could look at a number of Asian countries and the extent to which there were similarities or differences in how social processes affected birth intervals." And to turn a long story into a short one, we applied for a grant and were successful in getting it and several other grants after that.

**VDT:** You did that fine article, looking at eight different countries [e.g., Rindfuss, Bumpass, Palmore, et al., "Childspacing in Asia: Similarities and Differences," *World Fertility Survey Comparative Studies*, Number 29, 1984], with Malaysian data from Jay Palmore and the Korean 1974 fertility survey, and the Philippines.

**RINDFUSS:** Yes. And so, maybe over a period of eight or nine years, Jay and Larry and I were collaborating on comparative studies of birth intervals. That's one avenue by which I entered Asian demography. And I was also interested in the timing of first births, and when I arrived at Chapel Hill, one of the persons that I'd heard a lot about from friends at Wisconsin was Charlie Hirschman, who was then on the faculty at Duke University.

**VDT:** He just bought a copy of *Demographic Destinies*, here at the meeting.

**RINDFUSS:** Wonderful! Actually, I'd been telling him how good they are. And Charlie and I were talking about some of his interests in Asia and I was talking about some of my interests in the timing of first births. Again, we applied for a grant and were successful.

**VDT:** That was NICHD too?

**RINDFUSS:** One was NICHD and one was National Science Foundation. So that started my other stream of Asian research. And then since then, I've been fortunate to collaborate with a number of Asian scholars, including--well, the person I've worked with most in Asia is Apichat Chamratrithirong.

**VDT:** It's nice to have him here [in Denver]. He was at our Psychosocial Workshop [preceding the PAA meeting], he and his other colleague from Mahidol University [Bangkok]. That's the first time I've seen them at a PAA meeting.

**RINDFUSS:** No, people from Mahidol have been coming to PAA meetings at least for six or seven years.

**VDT:** Did he work with you at North Carolina?

**RINDFUSS:** No. He's visited North Carolina maybe for a period up to a month, but he's never spent longer than a month in North Carolina. Nor have I ever spent more than three to four weeks in Thailand.

**VDT:** But you have been going to Nang Rong, this village. Why did you choose that? I should tell

you that I spent two years in Bangkok--my husband was with ECAFE [Economic Commission for Asia and the Far East] from 1958 to 60--so I have an abiding interest in Thailand. You've chosen Nang Rong, a village on the Cambodian border?

**RINDFUSS:** Nang Rong is actually a district and we have data from 50 villages. I was not involved in the first round of data collection. Apichat and his colleagues were involved in the start. The initial purpose of that study was to evaluate a broad-based modernization program which was about to be started then.

**VDT:** Which also you did in the Philippines; you've done that there too.

**RINDFUSS:** I wasn't involved in the Philippines data collection at all.

**VDT:** I understand, but the data were collected to look at the effects of a similar modernization project.

**RINDFUSS:** Right. In Nang Rong, I wasn't involved in the first round of the data collection, but then for the second round, I as well as my colleagues, Barbara Entwisle and David Guilkey, made some suggestions. Then we wrote a grant proposal to analyze the data.

**VDT:** There you are looking at community variables that you would have liked to get also in your teenage study?

**RINDFUSS:** Yes.

**VDT:** Most of your research and publications involve teamwork. Is that the only way to go now?

**RINDFUSS:** I personally think that the quality of the research will be better if you have an effective team of researchers, but different people have different styles. Certainly, it works best for me. I know what I'm good at; I know what my limitations are, and it's nice to have other people working with me that are good in areas where I'm weak, and vice versa.

**VDT:** I asked Larry this question, as you recall, how you worked together, and he said his style of working with Jim Sweet is different from his style of working with you. Give me an example of how you would work with Larry, across the universities--picking up the telephone, faxing, or what?

**RINDFUSS:** In many cases, yes, it's picking up the telephone. There was one project where we were collaborating and the third person was Gray Swicegood [University of Illinois]. On maybe two or three different occasions, we decided that the most convenient place to meet was in the hotel near the airport in Chicago and we would go there. It had the advantage that there were no interruptions from students or committee work or anything like that.

Sometimes, like when Larry and Jay and I collaborated, we would get together at the East-West Center and work there. I completely agree with what Larry says, the style is different depending on who I'm collaborating with, and sometimes it's different on different projects working with the same person.

**VDT:** Give me an example. Do you decide how you're going to do the statistical analysis, or do you have the original ideas; do you write the first draft?

**RINDFUSS:** Oh, it varies a lot. I've done some work with David Guilkey and there the decision is fairly clear. He's an econometrician and he takes main responsibility for the statistical areas and I take main responsibility for the sociological and the sociodemographic end. But when I work with someone like, let's say, Larry Bumpass or maybe Phil Morgan or others, where the difference in terms of social content and statistical expertise isn't quite so apparent, it works out differently in each paper. Sometimes one person will take the lead in the analysis; sometimes we'll sit down and work it out together; sometimes one person will write an entire first draft; sometimes we'll write it in pieces and then try to convert it into something that has some overall coherence.

**VDT:** And you're very good about giving credit to everybody who helped you. I particularly liked the way you started out your published presidential address of last year, "The Young Adult Years: Diversity, Structural Change, and Fertility," when it appeared in *Demography* [November 1991]. You pointed out that, "Although this is, by tradition, a single-authored article"--and I must say it's probably almost the only one on which you've had *only* your name, except your first one. I noticed you had in the Research Reports of the Commission on Population Growth and the American Future [1973], your name only appeared on a very short chapter ["Recent Trends in Population Attitudes"].

**RINDFUSS:** Yes.

**VDT:** "Numerous individuals and groups provided invaluable assistance." And you went on to list many, starting with NICHD, giving the funding, and including your family. I liked that; that's how I knew your sons' names. That was a nice touch; I hadn't seen that before.

**RINDFUSS:** Thank you. I really do think that the nature of a lot of demographic research right now requires the collaboration of a lot of people, and I think it's important that everyone get recognized.

**VDT:** Good. Incidentally, you had no title for your address even in the final program for the last meeting. We all said, "What's he going to talk about?" It had never happened before, and this year, Etienne [van de Walle] also has no title [in final 1992 program, for his presidential address], so it will be a lovely surprise. We were all wondering what it was going to be. But, it was *so* interesting. Your singling out of the 18-to-30 adult years, that was a new age division. Did you think that up?

**RINDFUSS:** Yes. Let me speak about the title first. Quite literally when the program had to be printed, there was still considerable uncertainty in my mind as to what I was going to say.

**VDT:** Did you have your topic, or do you mean what you were going to say about the topic?

**RINDFUSS:** Well, even the full extent of the topic. I decided that I was going to give myself enough flexibility that I wasn't going to put a title in the program. And then I was really keyed toward producing the oral version of the talk, so there was no need to think of a title. And after the PAA last year before I had to send off to *Demography*, I agonized endlessly over what to call it.

**VDT:** What did you have? You called it *something*.

**RINDFUSS:** I can't remember right now. I didn't have *any* working title for the longest time.

**VDT:** I mean as you started off the talk. I presume you had some title; I can't remember now.

**RINDFUSS:** In the talk itself?

**VDT:** Yes.

**RINDFUSS:** No, I didn't have a title.

**VDT:** Oh, you didn't! Well anyway, your age division, 18 to 30, as you say you probably thought up, and the "demographic density" of those years. That has stuck in people's minds; I think every presidential address, all the outstanding ones, have. For instance, you recalled the "multiphasic responses" of 1963, Kingsley Davis's speech, not to mention a few of your close predecessors, Sam Preston's and Jane Menken's--all outstanding speeches.

And then there's the graph, which I love, which has appeared in several places now--the demographic density graph [see, e.g., "Figure 3: Composite of Fertility, Migration, Marriage, School Leaving, and Unemployment Rates," page 498 of Rindfuss address in *Demography*, November 1991, shows cluster of highest rates at ages 18-30, approximately]. How did you come by all that?

**RINDFUSS:** This graph, actually, is a good illustration of how sometimes your best thoughts are accidental or they're afterthoughts. This graph was prepared because I was looking at the component graphs and I would sometimes place one on top of the other and hold them up to the light and finally I said, "I wonder what it would look like if they were all together?" So we produced the composite graph. When I first looked at it I kind of liked it but I wasn't sure how it would go over. This one in particular I showed to a number of my colleagues, to get their advice.

**VDT:** That was the one handout that you had, wasn't it, that everybody had?

**RINDFUSS:** It was a slide.

**VDT:** Well, it stuck in the mind, and then it came out in *Population Index* [Summer 1991], on the cover.

**RINDFUSS:** Yes. And I think it was in *Population Today*.

**VDT:** Oh, yes! [In same issue, May 1991, with coverage of 1991 PAA meeting, as graph in PT's regular "Speaking Graphically" feature, page 2, with the title, "Young Adulthood is a Busy Time," and the note: "Don't even *try* to disentangle the lines of this graph. During his presidential address at the 1991 PAA meeting, Ron Rindfuss used it to illustrate the 'demographic density' of the young adult years, ages 18-30. This 'everything graph' followed a series of separate graphs that showed young adulthood as a peak time for several demographic measures: fertility rates, first *and* second marriage rates, unemployment, transitions from school to work, and high residential mobility rates."]

You followed in the vein of Bumpass and Preston and Menken, speaking [in PAA presidential addresses] on issues of very current interest in the U.S. It was right on target. We'll get to it a bit later. Now, let's ask some of the questions I said I was going to ask you: Who have been some of the leading influences in your career?

You have explained Peter Donaldson [currently Population Council representative in Thailand]. I had him down here, because most presidents choose someone very influential in their career to introduce them, and there was Peter Donaldson and he was unexplained.

**RINDFUSS:** Yes. I've mentioned a number of them. Mary Powers is another example; she was the person who taught me the first population course I had. And then, of course, the faculty at Princeton--

Charlie Westoff, Norm Ryder, Ansley Coale--which was very important in shaping my early interest in the population field.

And, of course, going on to Wisconsin and working with Jim Sweet and Larry Bumpass. And then, quite frankly, I've been just enormously lucky in working with a wide variety of collaborators. It sounds like you've looked carefully at my vita and you know that there are a lot of people that I've worked with.

**VDT:** Indeed, you have. What about some of your leading students?

**RINDFUSS:** I was afraid you were going to ask that. Here we get into the name list. I'll not name everyone, but I'll say several things. First, let me talk about some of the post-docs that I've worked with. And again, I've been just very fortunate for, oh, the last dozen years to have every year either one or sometimes two post-docs that I've been working with. I hope they've benefited, but certainly I have. Post-docs, as I was saying before, have total freedom in their time, which means that they can not only do a lot of research but they can press me to carry my end of the bargain. It has been very rewarding.

**VDT:** I noticed, for instance, Audrey VandenHeuvel, who's now in Australia [coauthor on "Cohabitation: Precursor to Marriage or An Alternative to Being Single?", *Population and Development Review*, December 1990]. Is she one?

**RINDFUSS:** She was a graduate student.

**VDT:** And Joan Kahn [coauthor on "Adolescent Contraceptive Method Choices," *Demography*, August 1990].

**RINDFUSS:** She was a post-doc.

**VDT:** And Betsy Stephen [coauthor on "Racial Differences in Contraceptive Choice: Complexity and Implications," *Demography*, February 1988].

**RINDFUSS:** She was a post-doc.

**VDT:** Okay! I guessed, because now they've gone on.

**RINDFUSS:** Some of the other post-docs: Phil Morgan was a post-doc, as was Gray Swicegood [coauthors on the monograph, *First Births in America: Changes in the Timing of Parenthood*, 1988]. Recently, I have written a number of things with Elizabeth Cooksey, who just finished being a post-doc. Karin Brewster is a post-doc whom I'm currently working with. And I know I'm forgetting some.

**VDT:** Often their names are first on your articles. Is that because it's their main work and you've been in on it? Or how do you decide on who's senior author?

**RINDFUSS:** That's sometimes an awkward one. There's no real hard and fast rule. In most cases, it's clear who ought to be first author. Then in some cases, what happens is that we'll be working on a series of papers and while with any one particular paper it might not be clear who ought to be first author, what we'll aim for is balance over the course of two or three or four papers, so that in the long run it doesn't matter. Rather than worrying about a single paper, look at the stream of research.

**VDT:** And what do you regard as your leading publications and why? You've had so many.

**RINDFUSS:** [Laughter]. Oh--no, no. Well, in some ways, the book with Jim Sweet [*Postwar Fertility Trends and Differentials in the United States*, 1977] and the book with Phil Morgan and Gray Swicegood have been important, probably just because books *are* important. You can cover a much broader set of topics than you can with a typical article.

**VDT:** The material in each of your books has appeared before in articles, I've noticed.

**RINDFUSS:** Yes. They contain some material from articles, as well as new material.

**VDT:** It sums it up.

**RINDFUSS:** It sums it up; it allows you to have an expansive introduction and a conclusion. Books also allow you to publish some material not suitable for articles. So I would certainly highlight those two. I think the presidential address ["The Young Adult Years: Diversity, Structural Change, and Fertility," *Demography*, November 1991] is just recent enough that I'm still very happy with it.

**VDT:** You can well be; it's an outstanding one. You write so memorably. For instance, in your 1991 address: "Demographers are adept with boring data; we disaggregate." I love that. You made another funny remark yesterday as discussant in the teenage childbearing session; unfortunately, I lost my notes. And then [in the presidential address]: "The sparsity in middle age after the density of activity in young adult years is undoubtedly the demographic seed of the fabled midlife crisis." [Laughter] That's a lovely one! What explains these nice touches? They're not so possible in coauthored articles.

**RINDFUSS:** Well, with the presidential address, I had the freedom to spend a lot of time on each and every paragraph, whereas in a normal article I often don't have the luxury of multiple re-writes. So I think that's part of it there. And I also like writing. I enjoy the writing process. I enjoy having a few humorous touches, if you will. What often happens with my coauthored papers is that my coauthors convince me that the lines that might be humorous ought to be taken out.

**VDT:** That's too bad. Have you ever written for the popular press?

**RINDFUSS:** No.

**VDT:** You know there's a continuing discussion within PAA that more of our material ought to get into the popular press; it would get more attention.

**RINDFUSS:** I've certainly spent a lot of time talking to reporters, and not just because of the American Teenage Study. I've talked to reporters over the years about matters dealing with American fertility and marriage behavior. I share the opinion of many that we should do more to make our research accessible to a broader audience, but I haven't done any writing along those lines.

**VDT:** Well, perhaps that will come. What accomplishments in your career--to date, because as you pointed out [in letter confirming this interview] you've got a long way to go--have given you the most satisfaction? Now, I know you've had the biggest *frustration* with the teenage study.

**RINDFUSS:** Yes, that would rank up there with the biggest frustrations. I think one of the most satisfying aspects of this business is to watch former students and post-docs enter the profession and blossom, basically.

And I think another aspect of satisfaction is the actual process of doing research, ranging from thinking about the problem to talking with collaborators, to spending a lot of time worrying about the coding and doing just the formalities, and then finally getting the first results. I find that satisfying, enjoyable.

**VDT:** That's great; means you're a great researcher. And then I also told you I'd ask you, "What do you view as the leading issues in U.S. demography over the two-plus decades you have been involved?" Of course, you've been involved in demography of Third World countries too, but let's first talk about the U.S.

**RINDFUSS:** There's a tendency to have tunnel vision--not necessarily tunnel vision, but there's a tendency to remember the most recent controversies that you've dealt with--and you have reminded me of my comments yesterday at the session dealing with the determinants and consequences of adolescent pregnancy ["Teenage Childbearing: Non-Economic Implications," Session 16 of 1992 PAA meeting]. It's certainly been an area that's been controversial for at least a decade, if not longer, and it's important because it has not only some very real scientific implications but there are also a wide variety of policy implications.

**VDT:** Didn't I hear you say, well, the papers that you reviewed, none of them were quite right?

**RINDFUSS:** I tempered that by saying that I really don't expect a perfect paper in this area, and I include my own work. It's an area where many of the variables are very complexly and causally intertwined, so it's very difficult to untangle.

**VDT:** You said each paper was adding incrementally to the knowledge.

**RINDFUSS:** Right.

**VDT:** You were rather hard on them--well, three of them were using the National Survey of Youth, which you have not used?

**RINDFUSS:** Correct. I hope I wasn't too hard on any of them.

**VDT:** No. You had a clever criticism of one of them--I've forgotten what it was--on the one that looked at cousins; that was complicated. You said you had written in a 1980 paper already, that had to do with education and fertility [with Larry Bumpass and Craig St. John, "Education and Fertility: Implications for the Roles Women Occupy," *American Sociological Review*, 1980, pp. 431-447]. What had you written in that paper?

**RINDFUSS:** In that paper, we showed that while education has an effect on the time of the first birth, the causal direction the other way appears to be insignificant, that is, our results showed that there was no statistically significant effect of having an early birth on terminating one's education. And that was counter to the conventional wisdom at the time. There continue to be arguments about this. There are a number of people that have since found results that are similar to the ones that we found; there are people who find the opposite. There were two sessions yesterday that dealt with this controversy. There will be a two-day meeting at NICHD in the middle of May, dealing with this controversy.

**VDT:** About whether or not education is terminated by an early first birth?

**RINDFUSS:** Well, it's broader than that: Are there detrimental consequences for the mother or the child of having a birth in one's teen years? The one paper yesterday dealt with the consequences for children. There are other papers that talk about health consequences for children, socioeconomic attainment of the mother, marital stability, and so forth. There are a wide variety of outcomes that people have been looking at and talking about, and reaching different conclusions.

**VDT:** You haven't mentioned the fertility trends of these two decades. You said in your presidential address--and I thought that was very clever of you--that there was possibly going to be a fertility increase, and you were using data--the latest you had, I believe, was 1987, or 88.

**RINDFUSS:** No, 88 and 89.

**VDT:** Well, 1989 and 90, it *has* gone up.

**RINDFUSS:** Yes.

**VDT:** Which you would attribute to there no longer being such constraints on fertility set up by being a single mother, or a working mother, because they are coping.

**RINDFUSS:** Yes.

**VDT:** Men are becoming almost immaterial; women can do it. And then fertility did indeed go up in 89 and 90, but then it dropped again in 91, probably due to the recession. Now, that's another thing; you've stressed period effects over cohort effects.

**RINDFUSS:** Very much so. I'm not sure that Norm Ryder will ever forgive me for that.

**VDT:** Exactly! I was going to say, that this is contrary to Norm Ryder, who obviously has been important for you. Even before you told me about it, it was obvious.

**RINDFUSS:** Yes. Let's go back to what's likely to happen to fertility in the future. What I tried to say in the presidential address is that a number of fundamental constraints that used to exist, leading toward lower fertility, seem to be becoming more and more relaxed. Now, that doesn't necessarily mean that fertility will go up; it just means that conditions are ripe. Think of it like these severe-weather bulletins that you get from time to time, saying that conditions are ripe for a tornado or conditions are ripe for a thunderstorm. No one's making predictions that there necessarily will be one, but that the probabilities have increased. And that's basically what I was saying. And that does run counter to what a lot of people have been saying about the future of fertility in the United States.

**VDT:** You mentioned the famous Charlie Westoff paper of 1978 ["Marriage and Fertility in the Developed Countries," *Scientific American*, Vol. 239, No. 6, 1978].

**RINDFUSS:** Yes.

**VDT:** There could never be anything but low fertility.

**RINDFUSS:** Right. Charlie would disagree with me. Larry Bumpass, I think, would also disagree with me; in fact, I *know* he would disagree with me. And a number of other people would as well. And, we'll see.

**VDT:** But it *did*; you don't have to see. It went up to a total fertility rate of just over 2.

**RINDFUSS:** Right.

**VDT:** But then the numbers of births went down again last year, doubtless due to the recession. You were talking about the period effects there.

**RINDFUSS:** In the United States, the average woman, the average couple, has two children and they have roughly a 35-year period in which to have those children. So, for many of them, the decision involves, when should we have the children? Should it be this year; should it be next year; should it be sometime later? And when you're in a situation where the decision is about when to have children rather than whether to have children or how many children to have, you're much more likely to be influenced by period effects.

Now, if there's a recession and, let's say, the husband or the wife is unemployed, or if they think there's a higher risk of being unemployed, they might decide to postpone their fertility. Or if you have some sort of major military action, people might decide to postpone their fertility, assuming there are not exemptions--a draft based on parenthood status.

**VDT:** Or hurry it up--nine months later it happens. Very plausible. We won't talk about the Third World, because I really think of you as a U.S.-based demographer.

**RINDFUSS:** Half of my work over the last decade, if not more, has been Third World, but that's fine.

**VDT:** Well, what *do* you feel about the Third World? Are you pessimistic--on the trends in fertility?

**RINDFUSS:** I haven't really addressed that, so, you're correct; let's not address that.

**VDT:** All right. Now on PAA. Do you remember your first PAA meeting? I have the list here.

**RINDFUSS:** Sure. I believe it was New Orleans; it was 1973.

**[RINDFUSS addendum, based on recollections subsequent to the interview.**

I remember now that I attended the PAA meetings in Toronto, which were the year before the meetings in New Orleans--perhaps my aging process is accelerating. I drove to the meetings from Princeton. I must have been preceded at the border crossing by several demographers, because the somewhat perplexed immigration official wanted to know why all these demographers were invading Canada. I remember trying to reassure him that our invasion would be quite temporary. [Those meetings were also controversial, because the hotel had a bar that only admitted men. Such a policy did not sit well with a broad cross-section of the PAA membership.]

## **INTERVIEW CONTINUES**

**VDT:** You had already been at Princeton a long time. How did you manage not to go to the meetings in Atlanta [1970] or Washington [1971]?

**RINDFUSS:** The student culture at the time was that students didn't normally go to population [PAA] meetings.

**VDT:** But that's changed.

**RINDFUSS:** That's changed very much. I'm not sure if--I'm describing my memory of the student culture at Princeton; it may have been different at other universities. But it's now changed at most of the major training centers.

**VDT:** And what do you remember about New Orleans?

**RINDFUSS:** [Laughter]

**VDT:** Oh, come on; I've heard other funny stories [about first PAA meetings].

**RINDFUSS:** There was one graduate student from a developing country who had been separated from his wife for some time. His wife had remained back in his home country and for much of the meeting, we never saw him, and it turns out that he thoroughly enjoyed all the activities on Bourbon Street.

**VDT:** Oh boy! We were in the Monteleone Hotel, which is right in the French quarter.

**RINDFUSS:** Yes, it was. That is another thing I remember about the meeting; that the Monteleone heavily overbooked and many people who had reservations were turned away and were at satellite hotels all over the place. So there were a lot of very unhappy demographers, at least the first day.

I remember the feeling that many graduate students will describe to me now and that is how nice it was to finally put faces with the names of people whose work I'd been reading for years. And I remember how few people I actually knew; how few people I could walk up to and say, "Hi, I haven't seen you in a while." It takes going to PAA for several years before the meetings serve the function that they do for me now, where I get a chance to see people, old friends, old colleagues, former students, and so forth. Whereas, students going for the first time, they know their fellow students, they know their faculty members from their own university, but they tend not to know many other people.

**VDT:** That's why I'm working hard getting my niece [Wisconsin graduate student] around here.

**RINDFUSS:** I think that's important.

**VDT:** But not many people have an aunt there. How do you view the changes over the years? Let's talk about the numbers. In 1973 in New Orleans, there were 862 registered; that was a lowish number. Even here in Denver, which we thought would be rather low, it's almost up to 1100.

**RINDFUSS:** Yes. And last year in Washington, we had 1400 [1,399]. I think one way to view these numbers is we're an organization of about 2700, 2800 members [2,674 at the end of 1991], and to consistently have 1100, 1200, 1300, 1400 members show up for the annual meeting, I think speaks very well for the organization.

**VDT:** It does, indeed.

**RINDFUSS:** Most other organizations I know of, the proportion attending the annual meeting is much lower.

**VDT:** How do you account for that?

**RINDFUSS:** Great organization--filled with smart, enjoyable people. I think, compared to some of the other meetings I go to, the sessions are much better, the quality of the papers is better, the attendance at the sessions is better, and the dialogue that takes place is better.

**VDT:** Do you think people go to the sessions knowing they're going to be good? It's true; here the corridors are empty during the sessions; people are *in* sessions.

**RINDFUSS:** Yes, and that's not true in many other professional meetings.

**VDT:** I've heard that from many others. You think that even though they're now up to 95 sessions, this year--even beating your almost-record of last year, 90, nine overlapping--that's not too frustrating?

**RINDFUSS:** I deliberately held the number of sessions to the same number that we had the year before [1990]. Yes, I worry about the number of concurrent sessions. It's frustrating when you look at a time slot and see two or three sessions that you want to attend and you know you can't go to all of them.

But on the other hand, we've had growth in the quality and the quantity of research that's being done, and it's important to allow an outlet for such research. So, there's a real tension there, and I don't think there's an easy solution.

**VDT:** Let's talk about your program of last year. What did you do with all the papers you couldn't fit in? Many of the interviewees have told me they were frustrated they couldn't get all of them on the program, or even more.

**RINDFUSS:** Very much frustrated. For a number of them, I wrote a letter saying, "Sorry, but we can't use your paper." Of course, I don't see all the papers that don't show up on the program, because the organizers of individual sessions make choices and they will sometimes send papers on to the president, but sometimes they'll just write back to the persons saying, "I'm sorry but I can't use your paper." So I have no way of knowing how many papers that were submitted actually did not appear on the program.

**VDT:** You were on the PAA nominating committee, I noticed, in 1987-88. What are the criteria in choosing candidates for the Board? We'll get to the presidency in a moment.

**RINDFUSS:** That's a good question; I don't have a good answer. I don't remember when I was on that committee whether we talked about criteria. One thing that certainly happened is that the forms that are sent out each year, asking for nominations from the membership, are distributed to the members of the committee. We all looked at them. And I know in my case they influenced me. I was amazed at how much consistency there was in certain people being nominated.

I think the other thing that at least influenced *me* is that we had lists of who had been on the Board and who had been vice president and so forth in the past. And we're still a small enough organization that we know many of the people who would be appropriate candidates.

**VDT:** And what is your idea of how someone gets nominated to be president? Now, you yourself were nominated quite early on. As I pointed out to you, you're the first baby boom president, being born in 1946, though Jane Menken [president in 1985] and Larry Bumpass [1990] and Sam Preston

[1984] aren't much older. But, still, you're a baby boom president; you rose to the top pretty rapidly.

**RINDFUSS:** I guess so. [Laughter] I don't know why.

**VDT:** And you were running against Paul Schultz, who was running for the second time and he was defeated the second time. That seemed too bad.

**RINDFUSS:** I felt very bad about that. People aren't nominated to run for president unless they're well known and they've done high-quality work. The sad part about it is that one will win and one will lose, but I don't know any other way to run the system.

**VDT:** Will there continue to be a core interested in the workings of PAA as an institution? Now, it's always sad to see how few come to what we still persist in calling the "business" meeting--yesterday's annual membership meeting. It's held in too large a room. I think the program committee should be more pragmatic about it next year--put it in a smaller room. For several years now, it's been in too large a room, with a scattered number of people. Why is that?

**RINDFUSS:** Well, under the constitution, very little happens at the business meeting.

**VDT:** Since the constitution changed in 1974. You're the one who brought it up yesterday, that change, because we almost had some fiery works.

**RINDFUSS:** Yes, we did.

**VDT:** That gentleman who got up and wanted us to vote--was it pro-abortion? I've forgotten now.

**RINDFUSS:** I think it was funds for family planning in developing countries.

**VDT:** Okay, the kind of thing that brought up fiery debates in the early 1970s and on which the decision *could* be made at the business meeting, a vote could be taken. And then it was changed.

Larry Bumpass--I expected him to be the one to stand up and say that's no longer allowed by the constitution, because he was on the committee to bring about that change.

**RINDFUSS:** Oh really? I hadn't realized that.

**VDT:** It came up at the end of his interview last year. And you were very prompt to hand to Etienne [van de Walle] the constitution with that clause. [PAA policy is decided by action of the Board or referendum of the membership by mail, Article XIII of the revised constitution of 1974. The annual membership or "business" meeting, where policy could be decided before 1974 by votes of those attending the meeting, is now "a forum for open discussion of the affairs of the Association," Article XI.]

**RINDFUSS:** It was fortunate; Bob Willis had brought the constitution with him. He had it in his papers because at the Board meeting on Wednesday, we approved some changes to the bylaws of the constitution. So it was in everyone's papers, but fortunately Bob brought it with him.

**VDT:** I knew exactly where it was in the membership directory. Is that all there is to it? It means the business meetings are dull, but people who care about PAA as an institution . . .

**RINDFUSS:** I think they care. One of the things I've noticed in the last couple of years is that the average age of people at the business meeting is older than the average age of the organization as a whole.

**VDT:** Absolutely. Henry Shryock and Paul Glick and Charlie Nam were in the row behind me.

**RINDFUSS:** Exactly. I looked out and there were a lot of past presidents, a lot of past Board members, and they know very intimately the nature of the Association's workings, so I think it's more meaningful to them than it would be to a student member or a fairly recent member.

**VDT:** Well, let's suggest anyway that they have it in a smaller room next year. Now, some of the important issues in PAA as you've seen them over the years that you have been involved. For instance, the tensions between the mainstream demographers and the applied demographers, which crop up from time to time.

**RINDFUSS:** They're still cropping up. As you know, I appointed a committee to look at the broad question of what are now called interest groups. If you look at the interest groups that we have right now, there's state and local government and business, China, and migration--four that we have now. And we have a request to form one on aging. And if you look at those five, there's no real coherence to them. One of them is a country; two of them have more to do with employment; one has to do with the traditional subject matter of the field. What I'm hoping the committee will do is carefully look at these issues and suggest something that will rationalize the system more than the ad hoc approach that we have right now.

One of the worries that I have--and it's come up at all the Board meetings that I've been to recently, with the exception of the one this week, and it didn't come up this week because the ad hoc committee is still deliberating--is that, on the one hand, you want to make sure that the organization serves the needs of all its members and, on the other hand, you don't want the organization splintering into a large number of special interest groups. There are other organizations that I belong to where that process has happened, and people wind up identifying with their interest group or groups and not really identifying with the broader organization. I expect we'll have a report from Larry Bumpass's committee at the fall Board meeting; discussions have been taking place here. That's one big area that I had to deal with. Another area I had to deal with involved the public affairs work.

**VDT:** That's been changed; what big change happened?

**RINDFUSS:** The year before, Larry Bumpass [president in 1990] had appointed a committee that was chaired by Ren Farley to look very broadly at the Association's public affairs activities and last fall Ren came in with his report. There was a lot of discussion, and basically the Board said that we've been in the public affairs business for about a dozen years [Public Affairs Committee established in 1979], that we've been very well served by it, that it's an extremely important part of the Association's activities, and that it was now time to routinize the committee membership structure, and that we would sever our financial relationship with the Population Resource Center. The decision was that we would hire someone ourselves and have our own public affairs specialist. We will be cooperating with the newly formed Association of Population Centers.

**VDT:** Would no longer work through the Population Resource Center?

**RINDFUSS:** We hope to continue having close collaborative ties with the Population Resource Center.

**VDT:** Oh, really?

**RINDFUSS:** Oh, definitely. Their agenda and our agenda overlap on many issues.

**VDT:** You don't feel that that will mean that PAA is less in the political scene that it has been?

**RINDFUSS:** No, I think if anything we'll be more in the political scene. Finishing touches are being put on the arrangements now.

**VDT:** Very good. Quickly, a few other things. Do you think the business and state and local people will stay in PAA?

**RINDFUSS:** Very much so. I don't want to talk about it now, but we had a meeting yesterday that included representatives from the state and local [government] and business committees and members of Larry's committee. I do think we worked out the broad outlines of a solution to the interest group issues that will make the state and local and business people very happy.

**VDT:** That's good. Do you think PAA should actively recruit more members? As you know, the membership dropped somewhat last year. Though you talked about 2700/2800, it isn't; it's 2,647 at the end of 1991 [down from 2,752 at the end of 1990]. Probably a recession effect last year.

**RINDFUSS:** Yes.

**VDT:** And it seems to have been stuck at about 2,600 since the mid-1970s.

**RINDFUSS:** I don't have a strong opinion on that. There are some advantages to going through a very active recruitment process and there are some disadvantages. I haven't been forced to think carefully about where I come down on it, so I don't have a strong opinion.

**VDT:** Back to you for one moment: How do you manage your very heavy schedule? You are handling a lot of balls, and you seem so unflappable, a calm person.

**RINDFUSS:** [Laughter] Well, I'm not sure I'm unflappable. One way I manage to handle it is that, as you pointed out, most of my work has been collaborative, and I've been just extremely fortunate to work with people who are talented and efficient and so forth, and that's helped enormously. The staff in the sociology department and in the Carolina Population Center have also helped enormously. There's not much else I can think of that lets me do it.

**VDT:** And you have a nice family life; I can tell that. I met your wife Maggie at Maryland.

**RINDFUSS:** That's right.

**VDT:** Has she worked through the years?

**RINDFUSS:** She's done a variety of things. Right now, she's a freelance writer; she's writing short stories. She's been doing that for the last couple of years.

**VDT:** Interesting! And your two sons are in college?

**RINDFUSS:** Yes.

**VDT:** Both at the same time--at North Carolina?

**RINDFUSS:** One's at North Carolina--he'll be a junior next year--and one's at Tulane and will be a sophomore next year.

**VDT:** What do they study?

**RINDFUSS:** The one who's going to be a junior is planning to be a psychology major, and the sophomore is undecided.

**VDT:** And your plans for the future? As I mentioned, you had said in a letter there would be a better historical perspective on your career if this interview took place ten years hence. I hope there will be a followup, because I'm sure you will be accomplishing a lot more.

**RINDFUSS:** Well, I hope so. [Laughter]

**VDT:** *Including* the teenage survey.

**RINDFUSS:** I'm not sure about that one.

**VDT:** Thank you very much, Ron. Let me just take a photo of you.

**RINDFUSS:** Okay.



This is the photo that Jean van der Tak took of Ron Rindfuss at the interview in 1992

## **INTERVIEW CONTINUES**

**VDT:** We're just talking about the presidential address, which we're going to in a moment, of Etienne van de Walle, and you say it's a wonderful tradition that people pack into the room to hear the address.

**RINDFUSS:** And that's certainly not the case in many other organizations of which I'm a member. We have a tradition here of presidents spending a lot of time and working carefully on their addresses. I'm looking forward to Etienne's.

**VDT:** You feel that--well, it's the climax of a career; it's what you're pretty well known for. I think Sam Preston will forever be his "Children and the Elderly" ["Children and the Elderly: Divergent Paths for America's Dependents," address of 1984], and Kingsley Davis his "multiphasic response" ["The Theory of Change and Response in Modern Demographic History," 1963].

**RINDFUSS:** Yes.

**VDT:** And you will be your young adult years.

**RINDFUSS:** You're a good enough historian to know that we have to wait five or ten years before we know how I'll be remembered for that.

**VDT:** I think Etienne van de Walle is going to be either Africa or historical demography. What's it going to be?

**RINDFUSS:** I've talked to him; it'll be historical.

**VDT:** Really--not Africa! We'll see. [Entitled "Fertility Transition, Conscious Choice and Numeracy," van de Walle's address dealt with the concept of family size through history, using examples both from Africa today and Europe in the past.]

## The Young Adult Years: Diversity, Structural Change, and Fertility\*

*Population Association of America  
1991 Presidential Address*

**Ronald R. Rindfuss**

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Depending on your perspective, demographers either have become quite aggressive in enlarging the territory considered to be part of population studies or have become more realistic in recognizing the complexity of human behavior. No matter how you wish to cast it, numerous examples can be found in the topics examined by hard-core demographers at the 1991 meetings of the Population Association of America: caregiving, the sharing of tasks within the household, conjugal harmony, wage inequality, child rearing, inheritance, the empty nest, retirement, political gerrymandering, and sexual behavior. These would have been inconceivable population topics for an earlier generation of demographers.

At one point, demographers concentrated on events or transitions, such as births, deaths, migrations, or marriages. These are the basic building blocks of population growth and distribution. Only rarely, and then briefly, did they foray into the roles or activities on either side of these events.<sup>1</sup> Roles such as parent, spouse, worker, or student sometimes might be referenced in theoretical explanations, but with the exception of labor force

\* Although this is, by tradition, a single-authored article, numerous individuals and groups provided invaluable assistance in its preparation. The National Institute of Child Health and Human Development, through Grants HD-24325 and HD-25482, provided financial support for research that lies behind the present article. My colleagues on both projects, Aphichat Chamratrithirong, Elizabeth Cooksey, Barbara Entwisle, David Guilkey, and Yothin Sawangdee, deserve credit for their contributions to these projects, upon which I drew heavily. Erika Stone performed the complex programming that allowed the presentation of the fairly simple summary numbers in this paper. David Claris provided all the graphics. Sharon Farrell prepared the final manuscript. Andrew Kavee, Deanna Pagnini, and Rebecca Sutterlin provided valuable research assistance for this paper. J. Michael Bowling provided recent fertility data for North Carolina. Barbara Wilson provided recent marriage and divorce data. Colleagues John Akin, Peter Bearman, Elizabeth Cooksey, Glen Elder, Barbara Entwisle, David Guilkey, Allan Parnell, Barry Popkin, Rachel Rosenfeld, Amy Tsui, and J. Richard Udry gave valuable comments on earlier versions and/or patiently discussed with me the ideas in this paper. The Carolina Population Center and the Department of Sociology, University of North Carolina, provided a stimulating environment for working through the ideas presented here. My family, Maggie, Luke, and Rob, cheerfully put up with me while I brooded over this paper. And finally, thanks to those PAA members who graciously tolerated the oral presentation. Multiplying the size of the audience by the length of the talk, I estimate that the audience's listening task was equivalent to approximately one-third of a normal professional's work year.

participation, such roles tended not to be included in empirical, demographic work. In this paper I move back and forth between events and roles.

By emphasizing both roles and events, I follow the general trend within demography of expanding the range of social behavior under examination. Although my interest has been in the social explanations of contemporary American fertility behavior, most of the paper will be devoted to a much broader array of variables. I would argue that an improved understanding of fertility behavior requires a vastly enhanced understanding of the relevant independent variables, particularly the other roles or activities experienced by those of childbearing age.

Despite the well-documented importance of adolescent childbearing and the recent importance of delayed childbearing, fertility behavior in the young adult years continues to account for the bulk of all births and sets the stage for the later years of childbearing. Hence, this paper emphasizes the young adult years. In contrast to other periods of the life course, the young adult years represent a period of multiple transitions; stated differently, they are demographically dense. The sequence of roles or activities experienced by young adults can be similar or quite diverse, and these sequences may or may not occur in a socially mandated order. The transitions themselves can be clear-cut, or they may be ambiguous as to whether the transition has even occurred.<sup>2</sup> These and related dimensions of the young adult years in turn affect fertility behavior.

There are hints in the United States that we may be at the beginning of a sustained increase in fertility. Towards the end of this paper, I address the possibility of an increase in childbearing. I will argue that we may be in the midst of a realignment of fertility supports and restraints, and that this realignment may be pronatalist. For now, it is important to note only that such a discussion very quickly involves the activities and expectations of young adults in a variety of areas besides fertility.

### **“Young Adult”: Which Ages?**

There is an inherent ambiguity in setting the boundaries of anything so nebulous as the “young adult years.” Yet my demographic heritage compels me to specify the boundaries clearly. Age 18 marks the lower boundary. It is an age often recognized in the law - for example, as the age when individuals first can vote legally or when young men register for the draft. In all but three states, it is the earliest age at which one can marry without parental consent (Wardle 1983). For those who continue their education, 18 is the predominant age when the break is made between the more “adolescent” high school and the more “adult” college.

At the upper extreme, 30 represents the end of the young adult years. Although 30 is not codified in law, there is substantial informal, anecdotal evidence suggesting that 30 marks the end of something. The 30th birthday is often a time for taking stock. It is the age typically used in questions addressed to young people about their adult occupational expectations. It is the age that members of my generation immortalized in the protest years of the late 1960s and early 1970s in various slogans<sup>3</sup> suggesting that we should not trust anyone over 30.

Bounding the young adult years in terms of chronological age is a classic demographic approach, and it has the advantage of allowing variance on virtually all relevant variables. Clearly, such variance exists at both boundaries. At 18, the lower boundary, some young men and women are unquestionably adults in the sense that they have already taken on all the major adult roles. They have left school and are responsible for their financial situation. They have married and are already raising their own children. In contrast, other

18-year-olds are quite a few years away from assuming the roles that society has come to associate with adulthood. Similar remarks apply to the upper boundary.

## Place and Data

The young adult years occur in specific historical periods and in specific places. Experiences and relationships among variables can be affected profoundly by their settings. The work of Elder and his colleagues demonstrates this point for the Great Depression and World War II (Elder 1974, 1987; Elder and Clipp 1988; Pavalko and Elder 1990). The recent demographic work on community or contextual effects demonstrates the importance of local settings (Brewster, Billy, and Grady 1991; Entwisle, Casterline, and Sayed 1989; Entwisle and Mason 1985; Entwisle et al. 1984).

Although our scientific goal is to make generalizations that transcend time and place, it is important to be specific about setting. The time frame for this paper is the 1980s. In most cases it will be 1987, the most recent year for which data are available. Further, most of the illustrations will be from the United States and will refer to the general population. A few will refer only to members of the high school class of 1972 - individuals born in 1953 and 1954 and now in their mid- to late thirties.

The data source for these class of 1972 members is The National Longitudinal Study of the High School Class of 1972 (NLS72), which began in spring 1972 when panel members were high school seniors (Ricciobono et al. 1981; Tourangeau et al. 1987). Five follow-ups were conducted: in fall 1973, 1974, 1976, and 1979 and in spring 1986. The data set is large, rich in detail, and of high quality.<sup>4</sup>

The NLS72 respondents are part of the baby boom cohorts. They have experienced substantial political, social, and economic change. During their high school years, activism over the Vietnam War and feminist issues were major social movements. During their initial adult years housing prices rose substantially. Toward their mid-twenties they faced extremely high interest rates on mortgages. Finally, they reached their thirtieth birthdays during the Reagan era.

## Family and Work

The activities and roles that I discuss fall into two spheres: family activities and work/school activities. These arenas are conceptually quite distinct. The family sphere involves such basic individual and societal issues as childbearing, child rearing, the regulation of conjugal relations, emotional support, sharing of meals, and household membership.

The work/school sphere tends to be less altruistic and more individualistic. It is governed by the need to maintain sustenance and to accumulate a surplus against future needs, as well as by the need to acquire the knowledge and credentials germane to the tasks involved. In most modernized societies, it is the characteristics and determination of individuals, rather than family connections, that matter in the work/school arena.

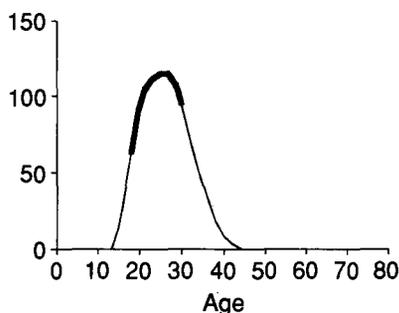
Activities in one sphere can have a substantial impact on activities in the other. Further, the extent to which activities in one sphere overlap with activities in the other is variable, depending on the physical and technological setting as well as on the time of the day during which activities occur. For instance, a husband and wife jointly managing a small business often can be engaged simultaneously in work and family activities, but clearly the situation would be quite difficult for someone whose job consists of operating a piece of heavy earth-moving machinery.

In societies where settled agriculture predominates, the combination of family and work activities is easier. Dwellings are open, or at least unlocked. The work place and the dwelling unit tend to be close to one another, often within reasonable walking distance. Economic activities occur in a family setting and with family-owned resources. Children need less structured supervision. They can find their parents when necessary - even if their parents are working. The movement towards industrial and service societies has tended to make family and work spheres distinct.

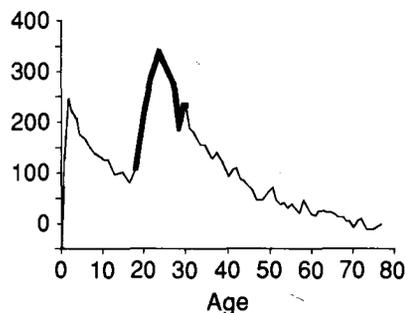
### Demographic Density

We now return to the contemporary United States, where the young adult years can be characterized as demographically dense. By "dense" I mean that more demographic action occurs during these years than during any other stage in the life course. Consider first the core demographic variables that form the components of population growth: mortality, fertility, and migration. Two of these three rates reach their maximum during the young adult years. Examine the age-specific fertility rates (National Center for Health Statistics 1989, Table 1-18) which are shown in Figure 1, Panel A. In reading this and other panels of Figures 1 and 2, note that ages 18 through 29 are depicted by a thickened line to facilitate locating the young adult years. As you can see, age-specific fertility rates are almost uniformly high during the twenties and begin declining at about age 27. Despite the well-publicized trend towards delayed childbearing (e.g., Rindfuss, Morgan, and Swicegood 1988), two-thirds of all births in 1987 were to women aged 18 to 29, and this

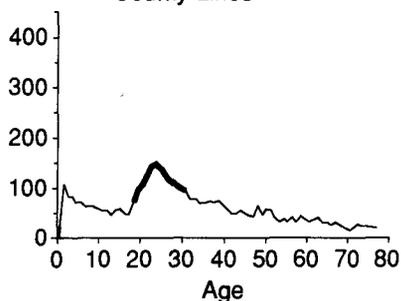
Panel A. Fertility Rates



Panel B. Residential Mobility Rates



Panel C. Rate of Moving across County Lines



Panel D. Probabilities of Dying

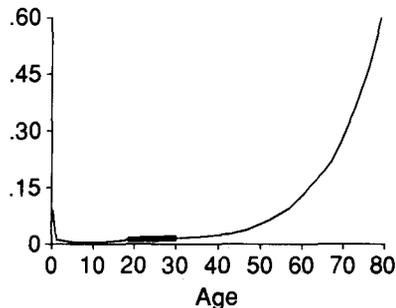


Figure 1. Age-Specific Fertility, Mortality, and Migration Rates per 1,000, 1987

proportion is the lowest it has been in the last 30 years. In 1975, for example, 76% of all births occurred among women in the young adult years.

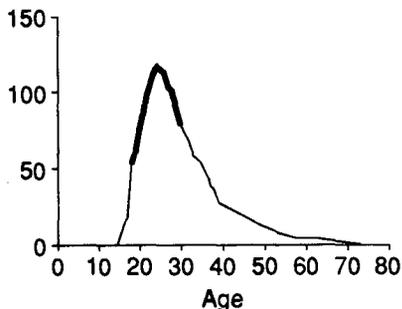
Young adults are also the most prone to move. Consider any change of residence since the previous year. These residential mobility rates (U.S. Bureau of the Census 1989a, Table 5) are shown in Figure 1, Panel B. The rates are highest for those in their early to mid-twenties, and they are relatively high throughout the young adult years. The high rates among infants and young children reflect the movement of their parents, who, most likely, are young adults. If we restrict our attention to moves that cross county lines (shown in Figure 1, Panel C; derived from U.S. Bureau of the Census 1989a, Table 5), the overall levels of movement decline but the pattern of relatively high rates in the young adult years remains.

Of the three core demographic variables, only mortality shows a trough during the young adult years. (See Figure 1, Panel D, which is based on National Center for Health Statistics 1990a, Table 6-2.) Even for mortality, certain causes of death, such as motor vehicle accidents, are highest among young adults.

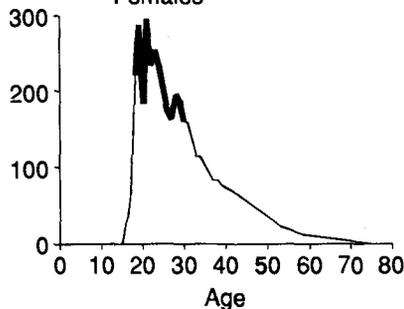
If we move away from these pivotal demographic variables to others traditionally in the demographic realm, a similar pattern of density emerges. Even during the present time, when marriage has been increasingly postponed, first marriage rates peak in the mid-twenties for women (See Figure 2, Panel A, which is based on unpublished NCHS data) and in the late twenties for men (the rates for males are not shown). If we examine the behavior of those who are formerly married, the remarriage rates again are highest for those in their twenties.

Divorces also are concentrated disproportionately in the young adult years. Young

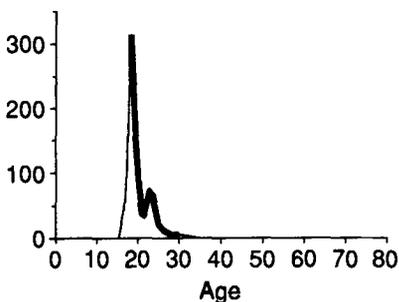
Panel A. First Marriage Rates, Females



Panel B. First Remarriage Rates, Females



Panel C. Rate of Leaving School



Panel D. Unemployment Rates

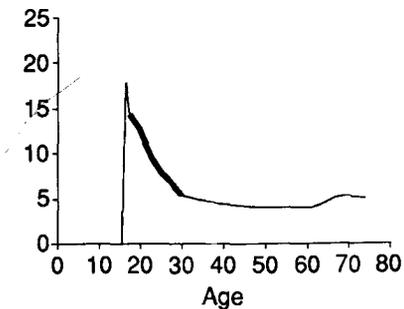


Figure 2. Age-Specific Marriage, School Leaving, and Unemployment Rates per 1,000, 1987

adult males constitute 15% of the married population and account for 32% of the divorce decrees.<sup>5</sup> Similarly, young adult women constitute 20% of the married population and are involved in 42% of all divorces.

The early part of the young adult years, and the few years preceding them, are also prime ages for leaving school. (This is shown in Figure 2, Panel C, which was derived from U.S. Bureau of the Census 1988, 1990a.) Correspondingly, these are the ages when young men and women obtain their first full-time jobs. These early jobs tend to be somewhat unstable, as Figure 2, Panel D shows (constructed from the March 1989 CPS file). Young adults have very high rates of unemployment.

To develop further the point about density, consider Figure 3, where the fertility, migration, marriage, school leaving, and unemployment rates are shown on the same graph. The vertical axis is deliberately not labeled, and the reader is urged *not* to try to visually disentangle the lines. Rather, concentrate on the density in the young adult years and the sparseness in middle age. The sparsity in middle age after the density of activity in the young adult years is undoubtedly the demographic seed of the fabled mid-life crisis. With respect to the young adult years, it is important to keep in mind that major decisions and role changes in most areas of life are occurring during a relatively short, overlapping period for the majority of the population. Although this time of the life course is dynamic, it is not easy. Yet, interestingly, young adults have a more positive view of their life than any other age group (Rossi and Rossi 1990).

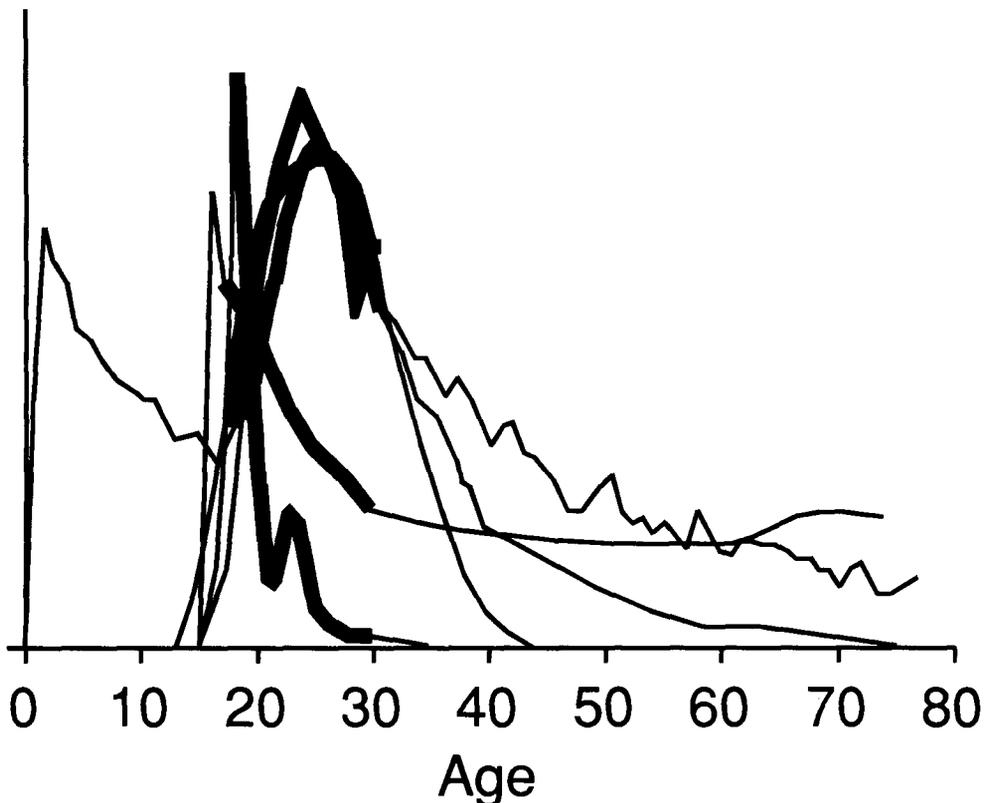


Figure 3. Composite of Fertility, Migration, Marriage, School Leaving, and Unemployment Rates

The illustrations so far have been centered around 1987 in the United States. Although hindsight eventually may prove me wrong, this year did not seem to be particularly dynamic from the perspective of social change.

The density of events during the young adult years would be even more dramatic during periods of rapid social change because young adults typically are the engines of social change. They move. They acquire more education. They fill new occupations. They are the soldiers involved in ground battles. Simply stated, young adults have more degrees of freedom than other people in order to respond to changing circumstances. To elaborate an idea from Kingsley Davis's 1963 PAA presidential address (Davis 1963), it is the actions of young adults that provide multiphasic demographic responses.

To depict further the effect of social change, let us move away for a moment from the United States. An example of a setting where social change is occurring very rapidly is Nang Rong, Thailand. Nang Rong is close to the Cambodian border, is relatively poor, and has been undergoing extremely rapid development. As an illustration of the pace of change in the area, in 1984 only one-third of the villages had electricity. Now they all have electricity. From the perspective of young adults, this pace of social change is important because they are coming to terms with adult roles in a social world which is radically different from that experienced by their parents during their parents' young adult years.

On a recent trip to Nang Rong during the dry season, an idle season from an agricultural perspective, I noted that young adults were conspicuous in their absence. In the villages one saw only middle-aged and elderly adults, as well as the small children of the absent young adults. Estimates by villagers suggested that about 70% of the young adults were temporarily or permanently away from the village. They were seeking more education. They were in higher-paying urban jobs. They were working in agricultural jobs in the frontier regions of Thailand. Many return during the agricultural season, bringing with them new financial resources and new ideas.

Returning now to illustrations from the United States, it is important to balance recognition of the density of the young adult years with acknowledgment of the relative scarcity of resources available during this period. Young adults are likely to be lacking in power and in economic resources. First consider financial resources. If we look at the simple measure of median income, it rises to a peak in a person's forties and remains relatively high during the fifties (U.S. Bureau of the Census 1990b). Although the contrast is greater for males than for females, income for young adults is substantially less for both genders than it will be in middle age.

This point is even more pronounced when one considers assets. Households headed by young adults represent 28% of all American households, but they have only 8% of all assets (calculated from U.S. Bureau of the Census 1990c). As a result of these age differences in income and assets, the average young adult is likely to have experienced a substantial loss of economic resources during the transition to adulthood - a loss that probably will not be made up until middle age.

It is difficult to quantify precisely the concept "power," but it seems fairly obvious that the young adult years are years of relatively little power. For example, on the basis of data from the 1980 census (U.S. Bureau of the Census 1981), even though young adults constitute 35% of the labor force, they represent only 22% of all managers in the labor force. Further, whatever power young adults have they tend not to exercise. In the last presidential election, as in previous elections, young adults had the lowest voting rate of any age group eligible to vote (U.S. Bureau of the Census 1989b).

## Diversity

Not only are the young adult years characterized by the occurrence of a substantial

number of demographic events, but the order in which the roles or activities occur varies widely. To think about the concept of "diversity" during a segment of the life course, it is necessary to focus on a sequence of activities or roles experienced over fixed time intervals rather than following the usual demographic practice of focusing on transitions into or out of certain roles.

To fix the distinction, consider the difference between fertility and parenthood. Fertility refers to the occurrence of births, which are very specific events. We can date their occurrence with remarkable precision and can use now-standard life table or event history techniques to examine the length of time between births. Parenthood, on the other hand, refers to the actions involved in raising a child, ranging from the physical nurturing necessary in infancy to the financial costs of the college years. Unfortunately, parenthood is difficult to measure well; it has been quantified along a wide variety of dimensions, including time and monetary inputs. Yet these dimensions capture only part of what is important about parenthood, and often they are measured at standards below those to which we are accustomed in the fertility field.

Although parenthood and fertility are related, the relationship is variable. The fluidity of the American marriage system offers numerous illustrations of the extent to which the parenthood role varies over time, particularly for fathers.

If we consider the sequences of roles occupied by young men and women, a population can be considered at the high end of the diversity continuum in the young adult years if members of that population experience substantial heterogeneity in the sequence of activities. Conversely, a population would have "similarity" in its young adult years if most or all of its members experienced the same sequence of activities.

Although diversity and similarity are characteristics of a population, individuals in a population are likely to be influenced by the amount of diversity that surrounds them: they will have similar or diverse role models.

The diversity in the young adult years in the United States can be illustrated for the work/school sphere by using data from the National Longitudinal Study of the High School Class of 1972. To keep the illustration manageable, I consider only three activities: school, work, and other.<sup>6</sup> "Other" is obviously a diverse category; it includes being a homemaker, being unemployed, and simply hanging out. I examine the 12 years of young adulthood, or more precisely the first 12 years following senior year in high school. For each year the activity state is measured in October. This concentration on October is necessary because the first four follow-ups asked only about this month; it is also a very good month on which to concentrate because it is relatively stable from the perspective of the annual rhythms of school and work activities.

Let me provide a few examples, because as demographers we are accustomed to thinking about transitions rather than sequences of roles. Consider three variations on college graduates during the 12 young adult years, which are shown in Figure 4. First is the classic image of entering college straight out of high school, graduating in four years, and spending the remainder of the young adult years in the labor force. A second variation might be interrupted schooling. The final example illustrates someone who experienced a bout of unemployment. We now examine the actual sequences or combinations followed by members of the High School Class of 1972.

This cohort contains 3,640 unique combinations for the 10,892 respondents. In interpreting this number of combinations it is worth remembering that there are  $3^{12}$ , or more than a half-million, possible combinations; but because we have fewer than 11,000 respondents, obviously the sample size provides the upper limit on the number of possible sequences. Even though there are substantively meaningful ways to combine these distinct sequences, the diversity is substantial and remarkable. Three-quarters of the combinations

AGE = 18 29

Example 1

ROLE= SSSSWWWWWWWWW

Example 2

ROLE= WSSWWWSSWWWW

Example 3

ROLE= SSSSWWWOWWW

S=School W=Work  
O=Other

Figure 4. Illustrations of Sequences of Young Adult's Activity States

contain only one respondent each. The most common sequence was working all 12 years; about 10% of the young men and women followed this path of continuous work.

There are distinct gender differences. Females experience far more diversity in their work/school sequences than males because they have a higher probability of spending one or more years in the "other" category, specifically because of the demands of motherhood.

To what extent is the family sphere characterized by diversity? It is more difficult to answer this question because research in the family arena has concentrated on events rather than on roles or activities. Nevertheless, we know that some married couples do not live together for such reasons as military service, incarceration, or the demands of dual careers (Chamrathirong, Morgan, and Rindfuss 1988; Rindfuss and Stephen 1990); that after a marital dissolution, biological fathers often have limited or no contact with their children (Seltzer 1991; Seltzer and Bianchi 1988); and that in certain circumstances it is common for the maternal grandmother to serve in the maternal role (Hogan, Hao, and Parrish 1990; Stack 1974). For reasons like these, we expect that substantial diversity also exists in the family sphere.

Does the diversity that characterizes the young adult years today represent a break with the past? Here I can only speculate because the detailed data needed to examine the issue

carefully are not available. In the family sphere, the evidence seems clear that there has been some increase in diversity. Marital dissolution, remarriage, and out-of-wedlock childbearing have all increased, and presumably have led to substantially greater diversity. Cohabitation, which typically is of short duration, now has become a distinct phase of the life course (Bumpass and Sweet 1989).

In the school/work sphere the evidence is not as clear. The general rise in educational attainment in the twentieth century probably has brought about some increase in diversity. The rising rate of labor force participation among mothers of young children (Oppenheimer 1982; Waite 1981) also would suggest an increase in diversity. It is hard, however, to evaluate the major period dislocations that have occurred throughout the present century, and which have had substantial impacts on the work and school lives of young adults. Examples include the Great Depression, the two world wars, the Vietnam War, and a series of recessions. It is likely that these events produced substantial diversity in the work/school sphere for earlier generations.

A final point about diversity is that it is likely to vary across societies. Some of the diversity in the work/school sphere in the contemporary United States reflects different patterns in the timing of schooling, which in turn reflect our ideology that everyone should have as many chances as possible to achieve his or her maximum potential. For example, our educational system allows and encourages dropouts to return. The formal educational systems in England and Germany, in contrast, are far less fluid or forgiving (e.g., Allmendinger 1989; Ashton and Lowe 1991). England and Germany also tend to place greater reliance on employers for training programs.

### Order or Disorder?

Characterizing the young adult years as diverse and demographically dense leaves out an important dimension. The paths followed by young adults in both the work and the family spheres can have a variety of consequences. They affect not only those who are living them, but also those related to or associated with the young adults. A straightforward illustration might involve the effects on preschool children of the parent's losing his or her job, or the effects on parents of their young adult children experiencing a marital dissolution (see Cherlin and Furstenberg 1986 for a discussion of the latter example).

Because so many people have a stake in the school, work, and family paths followed by young adults, it should not be surprising that prescriptions exist regarding the sequence of these paths and the desirability of certain activities or states over others. I am referring to norms, values, and preferences, which are notoriously elusive to define and hard to measure (e.g., Hogan and Astone 1986; Neugarten and Danan 1973). Also, in the United States, there is a lack of agreement on their details. Of course, the fact that we find it difficult to measure these prescriptions does not mean that they do not affect behavior.

Over and above widely accepted norms, there also are preferred sequences of activities in the young adult years. Sidestep the question of whether these preferences are norms and think of them as sequences that might please or worry your mother. In the work/school sphere, it is generally expected that schooling should be completed first. Then meaningful work should begin and should continue throughout the remainder of the young adult years. In the family sphere, it is generally expected that individuals should marry and subsequently should have children, and that the biological parents should remain married and raise their children. I use the term "order" to refer to such family and work paths, and the term "disorder" to refer to paths that deviate from the expected or preferred sequences. Both order and disorder refer to sequences of roles rather than to transitions or events.

Turning first to the work/school sphere and using the simple example from the High

School Class of 1972 cited above, we see that an orderly young adulthood (that is, continuous work, or school followed by continuous work) is the exception rather than the rule for this cohort. This pattern is shown in Table 1. For all members of this cohort, only 28% could be classified as having an orderly 12 young adult years. The remainder returned to school after working and/or spent one or more years in the "other" category.

One could argue that some of the sequences in the "disorder" category are actually quite orderly. For example, those who desire an MBA are often told that it is preferable to gain a few years' experience after earning the bachelor's degree before entering business school. Yet even if one accounted for all the cases of order that might appear as disorder, the majority still would be classified as disorderly.

Substantial gender differences occur in the proportion following an orderly work/school sequence during the young adult years. The reasons for these gender differences involve the role of homemaker, which to date has been defined normatively and behaviorally as a female role. From the perspective of the family, one might argue that a woman is expected to drop out of the labor force as the result of the birth of a child. Yet, as the sex role literature has long noted (e.g., Corcoran and Duncan 1979; Polachek 1975; Weiss and Gronau 1981; Wolf and Rosenfeld 1978), dropping out of school or work, even for a short period, tends to carry a penalty in terms of economic and occupational advancement.

The fact that disorderly sequences in the work/school sphere are common for men, and even more so for women, raises the obvious question: "so what?" If disorder has no lasting effect, it is merely one of those interesting curiosities of life; but if it seems to be related to behavior later in the life course, surely its causes and implications need to be examined.<sup>7</sup>

We now turn to the issue of order in the family sphere. As in the discussion of diversity, we cannot examine the issue of order as carefully in the family sphere as was possible in the work sphere because of past concentration on events and because of the relative lack of detail on sequences of family activities. Nevertheless, in view of the trends in marital dissolution and out-of-wedlock childbearing, it seems that disorder in the family sphere has been increasing.

Consider the relationship between marriage and childbearing. From the early 1960s onward, the fraction of all live births born to women who were not married has increased steadily. This is true for women of all ages, not only those in the young adult years. In 1960 the proportion was about 5%; now approximately one-fourth of all births occur among unmarried women (National Center for Health Statistics 1989).

Until the mid- to late 1970s, this increase occurred because marriage was being postponed. There was no indication that the fertility-inhibiting effects of singlehood had changed (Rindfuss and Parnell 1989). Since the mid-1970s, there is compelling evidence that for whites the relationship between marriage and childbearing has changed: white women are now much more likely to have children while they are unmarried. This is true throughout the young adult years, as well as in other age groups. For blacks there has been almost no change.

Table 1. Percentage Distribution of Orderly and Disorderly Work/School Activity Sequences in the Young Adult Years, by Gender

	Total	Males	Females
Order	28	41	17
Disorder	72	59	83
Total	100	100	100
Number of Respondents	10,892	5,026	5,866

Figure 5 illustrates the diminished fertility-inhibiting effects of singlehood. Among 20- to 24-year-olds the ratio of the marital fertility rates to nonmarital fertility rates shows reasonable stability for whites until the mid-1970s when it declines dramatically. Attitudinal data for the same period for the general population suggest that our attitudes towards the previously strong link between marriage and childbearing also have weakened considerably (Pagnini and Rindfuss 1991).

From the perspective of a student of American fertility trends, the changing relationship between marriage and fertility might signal a new structure in the explanation of American fertility. Writing almost two decades ago, at a time when American fertility rates were dropping precipitously, Ryder argued, correctly in my view, that “the course of American fertility in the twentieth century can be explained by a fixed set of reproductive norms operating within a changing context. These norms specify that all people are expected to marry and have two children as soon as, and providing that, their economic circumstances permit” (1973, p.61). It may be that the norms are now changing, and the resulting implications for fertility predictions and explanations could be profound. I return to this issue later.

### Crispness

So far I have referred to the entire sequence of activities during the full 12 years of young adulthood. For almost all young adults, this sequence is marked by transitions between various roles: student to worker, single to married, nonparent to parent, worker to unemployed. The timing and the order of these transitions have captured the attention of most social demographers.

Our approach to such transitions has been influenced heavily by the demographic heritage of examining births and deaths. For both events, the moment of the transition is

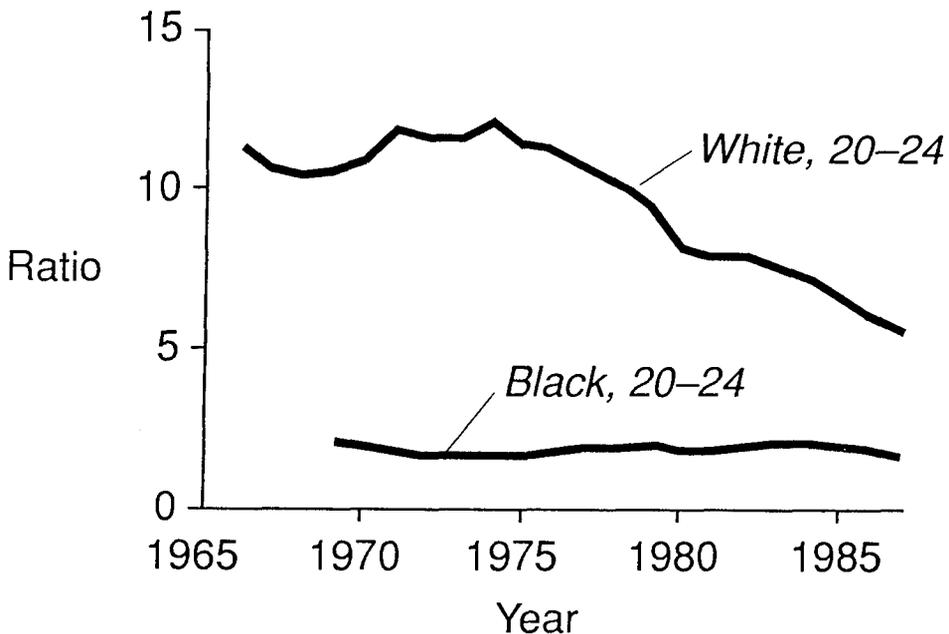


Figure 5. Ratio of Marital Fertility Rate to Nonmarital Fertility Rate, Age 20-24, by Race

relatively clear. In contrast, consider some transitions that are less biologically based. The transition from being single to being married is clear-cut only in a few societies. In our own, cohabitation recently has blurred the distinction to the point where some of us are debating whether cohabitation is closer to being single or to being married (Rindfuss and VandenHeuvel 1990). Either way, cohabitation followed by marriage is an example of a gradual or blurred transition.<sup>8</sup>

The dating of the transition from student to worker can be equally problematic. Among young adults who were college students in 1987, 23% were employed full-time and an additional 35% were employed part-time. These percentages, of course, are higher among older students, part-time students, and students attending two-year colleges. Yet even among 20- and 21-year-olds attending college full-time, 47% are working either full- or part-time.

For those who combine work and schooling, it is often difficult to determine exactly when the transition from student to worker occurs. The High School Class of 1972 data set is replete with illustrations. An airport policeman, for instance, finished his education while working full-time, and continued his job at the same airport for many years after receiving his bachelor's degree. Another example is a banker who worked towards her MBA while remaining at her job.

The general point is that transitions can be classified as "crisp" or "blurred." The closer one can come to providing a precise time point when the transition occurs (that is, a time when all the components of the first role or activity end and all the components of the subsequent role or activity begin), the closer one comes to identifying a crisp transition. On the other hand, if the components of the transition are assumed gradually, or if there is a significant time period when the two roles or activities are occurring simultaneously, the transition is blurred.

The extent to which transitions are crisp or blurred probably has important effects on subsequent stages of the life course. Perhaps the most consistent example to emerge in the literature so far is that legal marriages preceded by a cohabiting union, which is a relatively blurred transition, are more likely to end in marital dissolution than marriages in which the two partners did not live together before the legal marriage (Balakrishnan, et al. 1987; Bennett, Blanc, and Bloom 1988; Bumpass and Sweet 1989).

Unfortunately, to date we have relatively few other empirical examinations of the extent to which transitions are crisp or blurred. We have a propensity to rely on techniques such as life tables or hazards models, which tend to assume that young adults' transitions are crisp (see Mayer and Tuma 1990). Although hazard methods can be modified to incorporate the blurred character of many transitions, demographers simply have not pushed very far in this direction.

To recap, the young adult years have features that make them both exciting and difficult to study:

- 1) The young adult years are demographically dense in comparison with other ages.
- 2) The sequences of roles in both the family sphere and the work/school sphere occupied by young men and women can be quite diverse within a population, or the young men and women can follow similar paths. The United States now is marked by substantial diversity.
- 3) Individual sequences can be characterized as orderly or disorderly. This characterization results from contrasting the behaviors of individual members with the expectations or norms that exist in a society or within major subgroups.
- 4) The actual transitions that occur can be crisp and clear-cut, or they can be quite blurred. The more blurred the transition, the more challenging it is to examine.

## American Fertility

We now turn to the topic of American fertility trends. Although demographers study the birth event, it is important to remember that decisions are made by young men and women about the parent role. After all, people do not have a birth for the pleasure of the birthing process, but rather to become parents. When people make decisions about becoming parents, they make them in the context of the sequence of roles already occupied, the overlap among those roles, their own view of expected and appropriate roles, and their own interpretation of the life courses of those around them. This is particularly the case in the young adult years, but is also true in the childbearing years that precede or follow. As the roles, or the connections among roles, change, one would expect childbearing to change as well. I will argue that the connections among roles have changed since the 1950s. In order to state some of these general points clearly, I will abstract from the variation that exists in a society as heterogeneous as the United States.

Under the paradigm that governed during the middle of the twentieth century, the events of childbearing were tied integrally to the roles of child rearing. The biological mother was expected to maintain responsibility for the care and nurturing of children, while the biological father was the main financial provider. For women, the demands of child care took precedence over other roles whenever the role of mother and other roles were incompatible.<sup>9</sup>

Because of the structure of most educational institutions and work settings, the mother role invariably was incompatible with work or school. For a female, being out of work might increase or hasten fertility (see the arguments of Butz and Ward 1979). For men the relationship was different: because being a student or being out of work reduced the male's ability to be the main financial support, being a student or out of work postponed or suppressed fertility (Rindfuss et al. 1988, Chap. 8).

Under this regime, childbearing and child rearing were expected to occur within marriage. If the marriage was not harmonious and if childbearing already had taken place, the interests of the children were to take precedence. The importance of the union of the biological parents highlighted the significance of work, school, and family activities of both men and women.

This set of relationships arose with the affluence that accompanied industrialization. There were always exceptions, but this pattern was the cultural gestalt of the 1950s. It is now clear that changes have occurred in several important components.

The changes that have attracted the most attention are the increase in the labor force participation of mothers and the breaking down of employment barriers that discriminated against women. These dramatic changes were caused by a variety of forces.

The pressure for change in females' opportunities in the labor force reached its zenith in the mid-1970s. This was also the time when the U.S. total fertility rate reached its historic low point. As opportunities became available for women in the labor force, it was expected in the 1970s that the incompatibility between the mother role and the worker role, along with the attractiveness of new economic opportunities, would continue to exert downward pressure on childbearing.<sup>10</sup>

What has happened since the mid-1970s? Between 1974 and 1987, the total fertility rate has fluctuated within a very narrow band. Most would say that nothing has happened. We have had the tough job of making a straight line interesting. But demographers are adept with boring data; we disaggregate.

If you look at the behavior of married women between 1974 and 1987, you find that marital fertility rates have risen for every age group (National Center for Health Statistics 1989, Table 1-33). If you look at the behavior of unmarried women, you find that unmarried women's childbearing rates not only have risen (National Center for Health Statistics 1989,

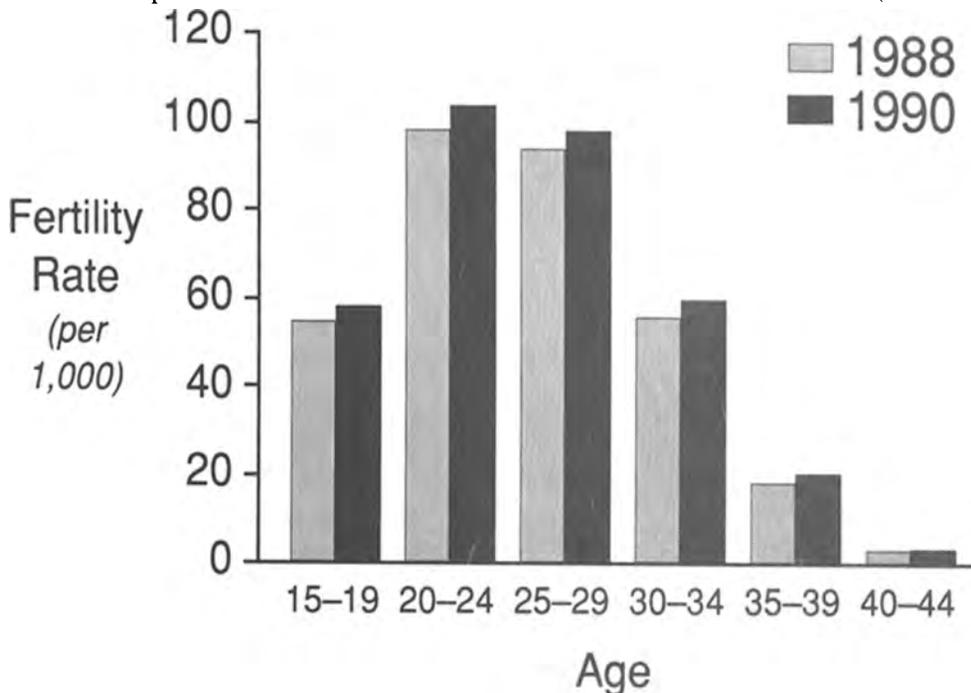
Table 1-32), but have risen faster than those for married women - a point I made earlier. The only reason that the total fertility rate did not rise is that the proportion in the unmarried state was rising faster than the difference between the married and the unmarried rates was diminishing. If we had the 1974 marital status distribution in 1987, our total fertility rate would be about 20% higher. It would be above replacement level.

There is scattered evidence that overall fertility is now increasing. Provisional data for the first nine months of 1990 show a 5% increase in the number of births over 1989 (National Center for Health Statistics 1991). The increase is found in most states. These are raw counts, however, and can be misleading.

For North Carolina, age-specific birth rates are available for the first 11 months of 1990. Although North Carolina may not be representative of the entire country, it is instructive to note that birth rates have increased for all age groups in North Carolina.<sup>11</sup> (See Figure 6.)

Are we about to witness an absence of the long-predicted further decline in fertility, or even a major rise? A definitive answer would require collateral predictions in all other areas of the young adult years, and I am not brash enough to make such an attempt. Instead I want to argue more modestly that certain changes are occurring which undermine some of the assumptions of earlier arguments for continued fertility decline. These changes encompass the evolving relationships among the roles of father, mother, spouse, worker, and student.

The arguments are different for men and for women; I start with men. With the increases in mothers' labor force participation, and in view of the gender inequities in both the labor market and households that were well documented in the 1970s, male behavior in the family sphere was expected to change. Time use studies, however, find repeatedly that women still spend far more time on household tasks and child care than do men (Gershuny



<sup>a</sup> Based on data from the first 11 months of each calendar year.

Figure 6. Age-Specific Birth Rates in North Carolina, 1988 and 1990<sup>a</sup>

and Robinson 1988; Rexroat and Shehan 1987). I am not aware of any behavioral data suggesting a revolutionary change in the behavior of husbands.

Among women there have been substantial behavioral changes. I have already mentioned the first change: the link between marriage and fertility has weakened. This trend trails, but is in keeping with, the steep rise in female-headed families due to marital dissolution. It would appear that an increasing proportion of young Americans are separating decisions about marriage from parenthood decisions (or nondecisions, as the case may be).

Do not misunderstand me. I am not arguing that it is easy to be a single parent or that it is good for the children involved. Indeed, the evidence consistently suggests the opposite (e.g., McLanahan and Booth 1989). Yet unless one lives in a highly unusual community, one is surrounded by numerous examples of single parents who somehow are managing to cope, survive, and in some cases thrive. Although social scientists have spent considerable effort in discussing the magnitude of the effects on children of being raised in a single-parent family, the existence of such negative effects on children may not be self-evident to young adults.

In addition to the changing relationship between marriage and fertility, as Bumpass (1990) noted in last year's PAA presidential address, there has been a weakening of the attitude that mothers should take care of their young children during the daytime or waking hours.

Structural changes also have occurred. In the past 20 years, a variety of child care options either have arisen or at least have become more widely available (e.g., Bianchi 1990; O'Connell and Bloom 1987; U.S. Bureau of the Census 1987). Commercial day care is now present in most communities. Many churches or community groups provide subsidized day care arrangements. In a variety of situations, relatives provide assistance. The rise of the service sector in the American economy has provided more opportunities for shift work, and, as Presser (1989) noted two years ago in her PAA presidential address, the rise of the service sector and of shift work provides another solution for combining the roles of mother and worker.

Again, this is not to say that it is easy to combine the two roles, or that our day care policies are adequate. Rather, I simply want to argue that more options are available today which allow the combination of mother and worker roles.

If marriage and fertility decisions have become more separate, if the fertility-inhibiting effects of singlehood have weakened, and if the combination of mother and worker roles has been made somewhat easier, then by implication the male role in childbearing and rearing has diminished. From the perspective of predicting future fertility trends, these changes would imply that greater weight needs be given to the trends and prospects of females in the young adult years. Women recently have accommodated to the mother role, whether or not they have husbands, and whether or not they are in the labor force. The removal of various constraints on female childbearing and child rearing behavior implies (other things being equal) that we are likely to see an increase in childbearing.<sup>12</sup> This increase is most likely to occur because more women will become mothers for the first time.

From the perspective of children, I join several recent PAA presidents in wondering whether current demographic trends are to the aggregate benefit of children.

Finally, I want to point out that the arguments I have made for the possibility of an increase in American fertility levels are compatible with numerous suggestions about the increasing American emphasis on individualism (e.g., Inglehardt 1990; Lesthaeghe and Surkyn 1988; Marini 1990). On the face of it, an initial reaction to a rise in childbearing might be that it signifies a return to values which emphasize the family and away from the increased emphasis on following one's own personal agenda.

Yet, consider the pronatalist forces I mentioned: 1) a loosening of the requirement

for men to be the financial providers, 2) a looser connection between marriage and childbearing, and 3) a relaxing of the requirement for the biological mother to be with her child during her child's waking hours. All of these trends move toward allowing individuals more choice. Thus if we have a sustained increase in fertility, the childbearing and child-rearing regime will be very different from the one we saw in the 1950s. Young adults will be pursuing their own preferences, with fewer constraints across and within roles.

In concluding, I want to return to a theme raised at the beginning of this paper. Fertility behavior is set in a complex context. The bulk of childbearing occurs during the young adult years - years that are dense, diverse, often blurred, and sometimes out of order. We need to pay increasing attention to the interplay between roles and transitions. Additional understanding of the social demography of fertility will lead us increasingly into related areas of human behavior, and further into the complex causal net within which fertility operates. Progress has been slow, but it is being made, and the PAA is well poised to make further progress.

### Notes

<sup>1</sup> To understand this point more clearly, examine the table of contents of such classic texts as Hauser and Duncan (1959) or Shryock and Siegel (1971).

<sup>2</sup> Throughout, in order to keep the arguments from becoming hopelessly tangled in detail, I abstract from the heterogeneity that exists in the United States stemming from differences in ethnicity, race, religion, socioeconomic status, or region. Clearly, such variables would be brought into detailed empirical work.

<sup>3</sup> *Respectfully Quoted* (Platt 1989, p. 343) traces the origin of this slogan to Jack Weinberg, a leader of the Berkeley Free Speech Movement: "We have a saying in the movement that we don't trust anyone over 30."

<sup>4</sup> All the estimates shown in this paper from the NLS72 data are weighted, and the numbers of respondents reported are unweighted.

<sup>5</sup> These percentages are derived from U.S. Bureau of the Census 1986, Table 1, and National Center for Health Statistics 1990b, Table 2-7.

<sup>6</sup> Respondents can be simultaneously working and in school. When this occurred, we gave preference to schooling on the assumption that it was a more inclusive activity. Research underway now is examining multiple-activity states (Cooksey and Rindfuss 1991; Sutterlin 1991). Also, work includes time spent in the military.

<sup>7</sup> Work in progress suggests that for men, disorder in the early adult years is associated with a later age at marriage and with lower fertility - results that are consistent with Hogan's (1981) earlier work. Also for men, disorder has a substantial negative impact on earnings. For women, surprisingly, disorder appears to have relatively little impact.

<sup>8</sup> Mayer and Tuma (1990) note how the blurred nature of cohabitation in the marriage transition raises serious issues when event history techniques are used to model marriage transitions.

<sup>9</sup> For example, see the broad discussion in Thornton and Freedman (1983).

<sup>10</sup> Westoff's (1978) article is an excellent overview of these arguments.

<sup>11</sup> These data were supplied by the Center for Health and Environmental Statistics, Department of Environment, Health, and Natural Resources, State of North Carolina.

<sup>12</sup> If the United States were to experience a sustained increase in fertility, we would not be the first industrialized country to do so in recent years. Sweden has had increases in period fertility rates since 1983 and is now above replacement level (Hoem 1990).

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