

DEMOGRAPHIC DESTINIES

Interviews with Presidents of the Population Association of America

Interview with Frank Notestein PAA President in 1947-48



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)

FRANK W. NOTESTEIN

PAA President in 1947-48 (No. 11). Interview with Anders Lunde at the PAA annual meeting, New Orleans, April 27, 1973.

CAREER HIGHLIGHTS: [For an excellent review of Frank Notestein's career and influence, see Norman B. Ryder, "Frank Wallace Notestein, 1902-1983," Population Studies, March 1984, pp.5-20. Valuable histories of the development of demography in the U.S. by Notestein himself are "Demography in the United States: a partial account of the development of the field," Population and Development Review, December 1982, pp. 651-687; "Reminiscences: the role of foundations, the Population Association of America, Princeton University and the United Nations in fostering American interest in population problems," in Clyde V. Kiser (ed.), Forty Years of Research in Human Fertility, Milbank Memorial Fund, 1971, pp. 67-84; and "Memories of the early years of the Association [PAA]," Population Index, Fall 1981, pp. 484-488.]

Frank Notestein, "one of the architects of modern demography" (Ryder, p. 5), was born in Alma, Michigan, in 1902 and died in Newtown, Pennsylvania, in February 1983. He received the B.S. in 1923 from Wooster College, Ohio (where he met his wife Daphne), and the Ph.D. in social statistics in 1927 from Cornell, where he studied with Walter Willcox, the "father of American demography." While with the Milbank Memorial Fund from 1928 to 1936, he conducted two pioneering studies on differential fertility in the U.S., one using children-ever-born data from the 1910 census and another, with Regine Stix, based on a follow-up of patients of the Margaret Sanger Clinic in New York City. In 1936 he took charge of the Office of Population Research on its founding at Princeton at the instigation of Frederick Osborn (PAA President in 1949-50). During his 23 years at Princeton, he taught the undergraduate and graduate courses in population, coedited Population Index, contributed to the development of the demographic transition theory, directed research which resulted in four influential volumes on the population of Europe, produced for the League of Nations, and several volumes on the population of Asia, for the U.S. State Department and international agencies, and launched the Princeton Fertility Study, which continued the work on U.S. fertility begun with the Indianapolis Study. From 1946 to 1948, on half-time leave from Princeton, he was Consultant-Director of the newly established Population Division of the United Nations in New York. He played a key role in the decision of John D. Rockefeller III to establish the Population Council in 1952, beginning with the report of the Rockefeller Foundation-sponsored trip that he led in 1948 to survey public health and population trends in the Far East. He became second president of the Population Council in 1959, following Frederick Osborn, and by the time of his retirement in 1968 had developed it into the leading organization in providing research and technical assistance on the population problems of less developed countries. Notestein was also author or coauthor of over 100 published works on fertility, population growth and demography.

LUNDE: Frank, would you please tell us a few things about the early days of the PAA.

NOTESTEIN: I remember the organizing meeting [May 7, 1931] fairly vividly. Hank [Henry Pratt] Fairchild was the moving spirit and through the good offices of Margaret Sanger, he had gotten some funds from the Milbank Memorial Fund to finance the meeting. I think there were some 35 of us there, including Frank Lorimer [PAA President 1946-47], who is now in New Zealand, and Frederick Osborn [President 1949-50], among those now surviving. It was intended by Professor Fairchild that a nominating committee put in his name as president and Mrs. Sanger as first vice-president. But difficulties arose immediately. Frederick Osborn was a very great admirer of Mrs. Sanger but he felt

rather keenly that there was a great need for a professional society which was not an action group and that it would be a great mistake if the association became an adjunct of her birth control movement, which he always supported and in which he was a strong believer. I think he even convinced Mrs. Sanger of this. I don't think she was at the meeting but in any event, he spoke of this and her name was withdrawn.

It's interesting, nowadays, I hear the youngsters worrying about the purity of science versus the need for action. Sometime ago, people were suggesting we ought to set up qualifications for demographers; no one should be entitled to membership in this superior group who was not fully qualified. Well, believe it or not, in the early days we took ourselves even more seriously. You wouldn't believe the distance we went in order to keep all power in the hands of the purest of the pure.

You may remember that the International Population Union [now the International Union for the Scientific Study of Population, IUSSP], which was started before the PAA, was not a membership organization but a union of societies and there wasn't any population society here. Gini and Raymond Pearl had gotten it together but there had to be some American institution. So Louis Dublin of the Metropolitan Life Insurance Company organized an American National Committee for the International Union. Then, in order to keep power where it should be in this nascent association [PAA], we had a College of Fellows, the Elect of the Elect. Then we had the plebeian organization of members of the Association. I happened to be on all of the groups.

I was quite a youngster then; 30 years old. I was kind of the youngster of the party. Probably I got there only because I was working for the Milbank Memorial Fund and they put up some of the money. My boss was Ed Sydenstricker. He knew that if they sent a youngster like me I would not be used as a moneybags. I got to watch the elder statesmen.

We used to meet in Dublin's office at the Metropolitan as the American National Committee and draw up a memorandum for the PAA. Then the same group would quickly journey uptown to the Town Hall Club and assemble as the College of Fellows of the Population Association. We would very seriously receive the memorandum of the committee of the Union which we had just passed, deliberate it with all due seriousness, and pass on the wisdom of our remarks to the Association. Having done so, we would quickly adjourn and reassemble downstairs as members of the Population Association and receive the superior wisdom of the College of Fellows.

It all seems so ridiculous. It took us a long time to realize that the action elements of the Association were probably less anxious to capture us than we were to avoid capture.

Things are turned around now and I think it's pretty healthy. I take a dim view of societies that decide they're going to be exclusive. As far as I'm concerned, interest enough to join is perhaps sufficient qualification. I don't like this self-selected concept; collects people into a mutual admiration society.

But the Population Association of America quickly came to abolish the College of Fellows and to open itself up. I think it was fortunate that we didn't initially start as an action group. I think it did a great deal of good for demography around the world to have a body of people becoming demographers--there was hardly such a trade then--whose primary dedication was to study. Now that studies are pretty well advanced and the fund of knowledge is much greater, I think the dangers of getting into action are less than they were.

Other reminiscences? It was a friendly association. For many years it met as the guest of Princeton University [nearly] every year; it was terribly pleasant for us at Princeton. It was a small association. It had the virtues of having economists, sociologists and, in the early days, biologists--people with quite a diversity of interests--but a small enough association. Every time I see Gunnar Myrdal--he used to be there in the old days--he remembers the pleasure of those meetings in the forties, when everyone knew everyone else, though we were each cultivating slightly different patches. Fairchild interested Eleanor Roosevelt somewhat and she invited us to the White House. But much more interesting, she brought her knitting and came to the session on differential fertility [at PAA's

meeting in Washington in May 1935]. So it was a rather small and gemütlich group of people.

It had perhaps very little influence on the course of events at the time, but a good deal of influence on the standing areas of demography. There really weren't demographers; there were statisticians. I remember in 1927 when I'd just finished my degree and was taking my new bride for a year's fellowship in Europe [studying occupational mortality on a Social Science Research Council fellowship], I started off by seeing [Dupont?], who was head of vital statistics in New York. When I told him what I was going to do, he said, "I've got the only job [of that kind] in the United States." The number of professional openings [in demography] was really very small.

LUNDE: What was the Census Bureau like in those days? Didn't they have a professional group that might be called population experts?

NOTESTEIN: Well, they had two PhDs. One was Elbert Edwards who did the economics at the time, occupational class variations. The other was Joseph Hill, who was a very considerable scholar. Later Leon Truesdell [PAA President 1939-40] came in. He took his Ph.D. in Brookings; he'd been in the Census before then. Stewart, the director of the Census, started as an office boy. I remember vividly some of us worrying about accuracy when he gave a long speech, something to the effect that you simply had to take everything people reported as true and one could never raise questions about [what was reported]. But he was a pretty good director of the Census.

LUNDE: When did Dr. Harold Dorn [PAA President 1957-58] come into the picture?

NOTESTEIN: Much later. I remember because I found out afterward, much to my surprise, that I'd been a candidate for that job. The committee decided to offer it to him and they couldn't have been more correct. Hal was a very good director of Vital Statistics and my interests were in quite a different direction.

LUNDE: Back through the years were there areas where the Association had some particular impact?

NOTESTEIN: Well, in the Depression we had a situation not at all unlike that of England where the unemployed were overrunning the relief systems and people were saying--it was almost another Malthusianism--that it was no good having cheap corn if these people were going to have more children. There was a great deal of talk about people on relief having babies. I think the Association did well having meetings and publicizing what was actually going on. Sam Stouffer did quite a few studies that got into the papers, showing that people on relief had lots of babies and that's why they got on relief. The need was there; people who had lots of kids were likely to be on relief. Then the birth rate went up a bit in 1934 and 1935 and there was a great hullabaloo about whether relief was lifting the number of births. I was able to take this by region in New York City and show that in areas where the unemployed were prevalent birth rates tended to drop rapidly and it was the well-to-do areas that were producing the children.

Then the Association was useful at the time that the [Committee on Population Problems of the] National Resources Committee was active. You remember that Frank Lorimer was [director of the technical staff]. After the Association got started, Frank raised some money from a Mrs. Robinson, a Quaker, to start a thing called Population Literature. He got Irene Taeuber [PAA President 1953-54] to do the bibliography on this and that led to two volumes. At the time, the Milbank [Memorial] Fund was paying something to the Association for a Permanent Secretary, wanting to get the Association launched, and Frank was the secretary. Then the Resources Committee came along and offered him the directorship of this big population study and he decided it was the thing to do. In the meantime, Milbank had given Princeton enough money to hire me to set up the Office of Population Research, in

1936. Princeton was pretty keen about our having a publication and the arrangement that Lorimer had [for funding] dropped out, so it was agreed that Irene Taeuber would join the Office of Population Research and we would put out the successor to Population Literature--Population Index. The Milbank Fund encouraged that. It was thought a public health foundation would have some trouble justifying the continued support of the Association journal, but since the Fund had decided to support my work at Princeton, it could be put into the budget there pretty easily without raising any question. Of course, this was most fortunate because by this channel, Irene Taeuber was working for the organization. She started in 1936 and retired this year [1973]. And if there's a more productive demographic scholar in the world, I don't know [him/her].

Now, the National Resources Committee--this was the cast. Lorimer was on it; that was one of the Association's contributions. P.K. Whelpton [PAA President 1941-42] and Warren Thompson [President 1936-38] were doing population projections; Thompson was on the governing committee [Committee on Population Problems]. E.B. Wilson was chairman of that committee. And I guess this is the only case of explicit censorship that I've ever run into. Is that in your records?

LUNDE: No, I haven't come across that. [Notestein described this incident more fully in his "Reminiscences," op. cit., p. 72.]

NOTESTEIN: Clyde Kiser [PAA President 1952-53] was invited to do a chapter under his own signature on differential fertility. One section was on determinants. He went through the biological determinants and went on to present evidence showing that biological factors are really unimportant and all the large differences in fertility arose through the prevalence and effectiveness of contraceptive practice. The chairman--who was not a politician in the least but just, I think, a timid academic--without consulting the committee or discussing it with Clyde, just cut it all out. So the section on the determinants of fertility talked a little about biological factors and stopped. This was over Clyde's signature and without consulting him, or Frank Lorimer.

So I called up the committee and told them I was writing an editorial about this in Population Index. They asked me to hold it and said, "If there's a second printing [of the committee's report, The Problems of a Changing Population, 1938], we will permit the text to be amended in a way that shows not the major importance of contraception but the minor importance of biological factors." [Kiser was given the opportunity to alter the text in a second printing.]

I've been interested in where censorship comes from. One hears about the establishment and I guess in the demographic establishment I've been part of it. But this was the only explicit case I've heard of. It didn't come from the Catholic Church, that I know of, or the politicians. It came not from something that happened but from something somebody was scared would happen. One of our major troubles is anticipating events that don't happen. It's the only explicit case of ruthless censorship that I know of. We're having some cases now with government, politics, that I don't know too much about. But by and large, governmental influence has not been of the sort that involved either vicious suppression or vicious changes of fact.

Well, the Association was involved in that and frankly, I was pleased as punch to write an expose of the thing at the time. I wrote it in Population Index [July 1938].

This bears on how innovations get started and the role of universities and foundations. My conclusion is that most of these innovations come basically from individuals--a few of them [in demography] were academic, not many. Well, quite a lot came from Chicago. They were sociologists, pushing population very much on its merits and calling it sociology. Raymond Pearl was pushing the biologic aspects.

I think innovations have come mainly in response to public situations. You go back to the Black Death and the Bills of Mortality; the tremendous unemployment of the Malthusian era; the unemployment of the Depression; the Great Migration--almost all of these gave rise to great over-

arching general theories--generally wrong--to the Pearl population law. The events dictate the attack.

Where do the funds come from? There aren't that many vested interests. Milbank Fund's interest came from a trustee, [Thomas] Cochran of the Morgan Bank, who said he wouldn't give more money for public health until someone got worried about birth control. This came up specially sharply over public health money for China, under Ed Sydenstricker. [Rod?] had been running the Fund long enough to know that management just loves to have a member of the board driving fanatically for something that [might be controversial]. In any case, I was brought into the Milbank Fund because they [the Milbank board] told us, "You have work to do." They always doubted the wisdom of a conservatively financed institution advocating a cause. But they would advocate the study of causes--the study of the situation. So I was brought in to do research that led to the study of birth control.

The Milbank Fund went ahead for a while. The Rockefeller Foundation--well, it went ahead and then it burned its fingers and backed off. Like any organization--it's a huge organization and every time you started talking about population, well, the science people would know they had the real solution. The malaria people would be a little scared if you'd say that dropping the death rate too fast would just complicate life; they knew they weren't complicating life--and they were not. And everyone knew that new interests took money away from the old interests. They began to finance a committee on sex [through the Committee for Research on the Problems of Sex of the National Academy of Sciences, the Rockefeller Foundation supported the research of Alfred Kinsey], but a fuss was raised and they drew out of that.

But John Rockefeller was excited about population. He'd been out in the Far East and came back with what was being worked on in many aspects of Asian life and one was population. He was worried that the Foundation hadn't given much thought to how medical and social science things mixed together. He wanted a public health man and a demographer to go out to have a look at Asia and come back and give their views on population policy to the Foundation. He called me and asked if I would like to do that. I said that would be fine but everything I knew about the Far East I'd learnt from Irene Taeuber [then working on The Population of Japan, published in 1958], couldn't she go. The amusing thing was that John Rockefeller didn't come. It's hard to remember now but the funds were young. This was 1948. The Rockefeller Foundation wasn't about to let somebody else travel under the Rockefeller name so we went with their support and all of a sudden we were taking over [establishing] another Foundation activity. We had a lovely time. The Foundation brought in Marshall Balfour and Roger Evans; we [four] visited China, Indonesia [Japan, Korea, Taiwan, and the Philippines]. We wrote up a report; it was published with the title Public Health and Demography in the Far East [Report of a Survey Trip, September 13-December 13, 1948, 1950]. Not long after that Cardinal Spellman said there were no circumstances in which he could approve of an organization that had anything to do with birth control. Well, frankly, that was just about that on the subject of birth control at the Foundation.

But amusingly, this undoubtedly helped us get money at Princeton from the Rockefeller Foundation. By now, Princeton was very proper. We were demographic; we weren't in the birth control business. This was a lovely way of assuaging some wounds. I was a beneficiary of the non-dangerous position for demographic work.

By the way, there was anxiety at the Milbank Fund in the early days because we were studying birth control. The Milbank Fund had gotten into terrible trouble over socialized medicine. I don't think the Cardinal could have done it on his own [deflected the Rockefeller Foundation from population work], but I think it was the Cardinal together with other staff members who were concerned about their particular areas of interest.

The thing I'm really coming to is that population [funding] started at the Milbank Fund; that was a pretty small outfit. Then the Rockefeller Foundation moved in. John Rockefeller III became chairman of the board and, frankly, the Population Council was started because John couldn't get the Foundation interested. He never told me that but I know it to be true. Because he found the

Foundation could not be properly interested in population, he set up the Population Council on his own.

The universities don't come off very well on this. They have to be bribed into new activity. Well, Chicago comes off well, in my judgement--in the old days; I'm not talking about the new--totally different thing. Rupert Vance [President 1951-52] and Odum [at the University of North Carolina] came off well as sponsors of innovation. But the same sort of vested interest happened in universities. All the monies come in. Everyone who is organized wants his cut. A new and different thing doesn't have professional backing--who are they? The slaughter of innocents becomes pretty heavy. At Princeton we brought in our own money and we brought graduate students. No economist wants to be a demographer. We were interested in strange people, so we did bring some students. This was an angle they weren't too concerned about. On the other hand at Yale, the international politics group came and every member of its political science department came to its session and there was trouble. You can put something in if it's not viewed as a threat.

What happened is that individuals like Warren Thompson, with old man Scripps of the newspaper chain--you've heard this story--he dug Thompson's thesis on Malthus out of the library, read it, took Thompson on his yacht out to the Far East and came back and established a foundation [Scripps Foundation for Research on Population Problems, Miami University, Oxford, Ohio]. It was meant to be much larger but there were two quick deaths [and estate taxes to pay]. I think as a maximum they never had much more than \$15,000 a year for both of them [Thompson and Whelpton] and it wouldn't have been possible in later days, except they got money from the Rockefeller Foundation. But Scripps, Cochran, Sydenstricker, John Rockefeller, Fred Osborn--well, I guess I better gossip a bit about Fred.

Fred, as I've already told you, was a key man in the organization of the Population Association. I wrote a piece about Fred on his 80th birthday, a speech at PAA ["Frederick Osborn, Demography's Statesman, on his Eightieth Spring," speech delivered by Notestein at the banquet during the PAA annual meeting in Atlantic City, April 11, 1969, Population Index, December 1969, pp. 367-371]. Fred retired when he was 39. He was well-to-do when he was born, I suppose. He was also a very successful promoter. The family had interests in the Detroit, Toledo and Ironton Railroad; pretty affluent. We had talks; I enjoyed those talks.

He said when he came out of Princeton he went to Cambridge for a year. Came back, wondered what to do. Well, socialism was in the air at the time and here he was--worried. So he went down to the public library and read. On the basis of that experience, he came up with two years of study [after his retirement, reading a course laid out by the anthropologist Clark Wissler at the Museum of Natural History]. Fred used to say, "I got into this business too late, I'll never be a technician. But I think I've studied enough now to ask this question. I think the resources devoted to the study of man are ridiculous. And I propose to devote the rest of my life to creating funds and organizations for the study of mankind." And indeed, that was what he did. He was a Princeton man; his father was a Princeton trustee. And between them, that was how population work got started at Princeton.

Fred went from that to the Bureau of the Budget in Washington, just before the war. He wanted to do some promotional things. He'd been worrying about the quality of the population, eugenics. And in his view, the preface to eugenics was to get the solid environment which would allow people to develop their inborn traits. So he went to Washington with the general view that he wanted to see if he could get free school lunches established throughout the nation, because without adequate nutrition, inborn ability could not be developed. When the war started, he was chairman of the Advisory Committee on Selective Service, helping to strengthen the psychological and psychiatric screening for the services. He was traveling and people said when you're down in North Carolina look at why we're getting terrible rejections for high blood pressure. He came up with all sorts of theories about water and diet.

Fred was a trustee of the Carnegie Corporation and the Milbank Fund and in those roles he got resources for the population field. He did an enormous amount of mining of resources. He practically forced us into the Indianapolis Study. A tower of strength in the whole field. A man who started with the eugenic point of view was the man who precisely because of his interest in action was the one who thought we should protect the scientific character of the Association. Fred has been demography's great statesman. He was the first executive officer of the Population Council.

Who else do you need to know about?

LUNDE: Can you add more on Henry Pratt Fairchild [PAA President 1931-35]?

NOTESTEIN: Facile writer, able talker. Troubled in his last years because he was radical. Surely not a totalitarian Communist at all but surely less exercised [about Communism] than many of the establishment were. His influence was undercut to some extent because from time to time he said some nice things about Russia. He was not at all an orthodox Communist, just a man who was liberal in most particulars and at a time when things were sufficiently charged from the Depression so as to make people super-sensitive. Fairchild was an excellent founding president of the Association. His daughter was an actress--is, for all I know--I haven't seen her for years. He was a widower; a charming and very friendly person. Not a very rigorous [scholar], I never felt. I differed very much with him on the thesis of his book, People [1939]. Some people who accuse me nowadays because they view me as having carried the Population Council more heavily into birth control than it had been would be amused to know how I criticized Fairchild. His view of the drop in the birth rate was that it was [all] due to the invention of contraception. The prescription to get the birth rate down was to get birth control going [something about the Bradlaugh-Besant trial]. Our view of the demographic transition was much more in line with social change as a fundamental determinant, as I still think it is. Then you say, "What is the next marginal addition you put on within the range of your possibilities?" That was important in getting the Population Council into birth control, because at that time, that was the next possible thing to do. It was a very different thing from saying that birth control is the total explanation.

LUNDE: How about Leon Truesdell [PAA President 1939-40]?

NOTESTEIN: Did you know he was a poet? We have a book of his poems; he did this as a young student. He was quite a sentimental man; a New Englander. I forget how he got into Census [Bureau]. He didn't complete his doctorate degree till long after he'd been in the Census. It was a [monograph] from the 1910 or 20 census.

LUNDE: Do you have any recollections of T.J. Woofter, Jr. [PAA President 1940-41]?

NOTESTEIN: A sociologist, mainly interested in race, grew up with Clyde Kiser in North Carolina. Seven Lean Years is one of his books, isn't it? He wrote that from one of the New Deal agencies; good book. I'll say one thing for Jack, he was a liberal-minded sociologist in the Depression days. I think it's important to remember that he's one of the very first people to call attention to the need for cohort reproduction rates. He was pointing out early, at Population Association meetings, that no real generation moves with the times, bearing and dying at the rates of a given year. Using period rates was artificial. He maybe didn't do it with mathematical rigor, but he saw these problems and emphasized them way ahead of anyone else.

LUNDE: When I used to talk to P.K. Whelpton, one thing I never asked was how he got started with cohort fertility. Was he, for example, influenced by Woofter?

NOTESTEIN: No, this came out of projection problems that he had. In the projection system, you pretend the events of this year are the events of a cohort passing through. Some of the stuff went wrong. And Pat said, "Well, let's do this by order of birth too. So you [project] not the childbearing experience of females age 20 this year, but the childbearing experience of childless women at age 20 this year. At what age do they have first children, second children and so forth. The assembly is a synthetic cohort. If you did this fairly age-specifically, you get one year in which 100 women have 108 children. That's a neat trick. Assuming he ran into these ridiculous things, this drove him into real cohorts. Synthetic cohorts become impossible. Pat was always looking for some way of getting a projection.

I think you probably have everything on Pat. That foundation [Scripps Foundation for Research in Population Problems] was originally two men and they were to take turns living around the world, but then the funds ran short. [Warren] Thompson was a better theorist than Pat. Pat was a better statistician; he came from agricultural economics. A very solid fellow. Clyde worked closely with him.

LUNDE: And Lowell Reed [PAA President 1942-45]?

NOTESTEIN: Lowell and Maggie Merrill, his assistant, were the best teachers I've ever come across. They have scattered around the world people who are making life tables. You remember we all had to worry about separation factors in life tables? Well, they'd all been indoctrinated with separation factors.

[Raymond] Pearl was a dynamic and important person; terribly flashy. He was arrogant and domineering, but when you got him going, he was one of these people you would just forgive. You would not hold him to the normal canon of behavior. Few people working closely with him were strong enough not to be made into Mr. Meek. Reed, who came from Maine, was a New Englander who was quite strong. Whereas Pearl was going off on laws of population growth, Reed was always interested in mathematical innovation. Pearl was the bouncer; Reed was the person who set things up. Despite his errors, he probably advanced the field more than most of the rest of us who [make pedestrian projections]. The field has often been pushed by the man who makes the dream and the wrong generalizations. Reed chaired the Advisory Council of the Milbank Fund for years. A wise man always. A very good teacher; an imaginative man. Feet on the ground. A darn good statistician who did a lot for the period.

LUNDE: Frank Hankins? He was President in 1945-46.

NOTESTEIN: I can't tell you too much about Frank Hankins. I knew him pretty well. He was at Smith College for years. A sociologist--a social biologist, a field that gets more attention now. Of somewhat rightwing persuasion. Articulate, good speaker. Interested in pushing population; interested in the qualitative aspect of population.

There was another person, Ellsworth Huntington, he was a geographer.

LUNDE: Yes, he wrote The History of Civilization.

NOTESTEIN: Also on the board of the Population Association. He had done a lot about the climate and population quality. I think the geographers always thought he was a good demographer and the demographers thought he was a good geographer. He was a terribly nice person. He had an identical twin. They were both short; both bald-headed; both wore goatees; and were both deaf and had battery sets, which were pretty large in those days. I remember one day we were having a board meeting in

the Town Hall Club--Fairchild was a member and we usually met there--we were on one floor dealing with the Population Association and on the floor just below, there was his identical twin presiding over a nudist colony.

LUNDE: His book, I guess, was Civilization and Climate. A couple of more questions. One is on your association with the Association. You mentioned that you think you have been to almost every meeting of the Association.

NOTESTEIN: I wasn't there last year; my wife and I went sightseeing in Greece. That's the only one I remember missing. Now, maybe I was out of the country sometimes, but I think I've been to all the meetings. I'm sure I've paid dues to this association as long as there has been one. For 20 years or so I was on the board, partly because we published Population Index.

The Association is much more complicated now. The field has advanced enormously. The technical work is superb. I think you don't have dedicated demographic missionaries today as there were in those years. We did have a real sense of mission. Of course, I'm an old fuddy-duddy now. But I resent the people who call themselves "Concerned Demographers." In the early years there weren't any other kind. We think we were concerned demographers. The simple arrogance of these youngsters adopting this name bothers me.

LUNDE: You had to have a sense of mission in order to get this thing off the ground in those days, I imagine.

NOTESTEIN: I think so. Well, there were a lot of things. There was a core of us who were compatible. There was the Milbank Fund and later some other help that got the thing going. And then there were the university centers--Hopkins, Miami [Ohio] and Scripps, Chicago, North Carolina, Michigan, with Ron Freedman--Ron Freedman came out of Chicago. A few core people, a little core money, and a core association of demographers.

LUNDE: What do you think of this particular meeting [New Orleans 1973]?

NOTESTEIN: It's like every other meeting you go to nowadays. I understand half of it. Of course, I'm obsolete. People do the same thing they used to do. You're asked to give a paper for 20 minutes; they give one for 40 minutes. Their next posts are on the line and they don't really realize that the listener doesn't catch all the nuances by ear. Until this afternoon, I've been to [understood?] at least 50 percent of the programs--in the old days it was also 50 percent. People then talked too long and talked too dully, and I among them. I guess that's to say most of the Association continues human.

I think there's more status-seeking now, perhaps because there's a chance to get somewhere with it. In those days, there wasn't an awful lot of it. I don't mean that we suffered. The field had more openings than there were people. That's been the case for a fairly considerable time. So though when I started, Dr. Dupont said, Don't get into the field; he had the only job, the fact is jobs have been bidding for people. I had it much easier career-wise than the people who went into economics or sociology. Now the competition is a little tougher. I think there's a little more status-seeking.

LUNDE: How did you actually get into this field that we now call demography?

NOTESTEIN: Out of boredom with economics. I was working at Cornell with H.J. Davenport, who was a magnificent teacher, no doubt about it. This was before Keynes and economics was price theory, not national economy. And it was logic-chopping--marginal utility, the price of pigs, corn, high-price land. And then I was taking statistics from Walter Willcox, who knew what a mean, median

and mode were and not much else, but was a great teacher in a way. He had started teaching statistics at Cornell as applied ethics, from philosophy. His doctoral dissertation was on divorce. He began it as a problem in social philosophy, but then he learnt about Bertillon's statistical approach to divorce and this changed his whole world.

Willcox got a letter from E.A. Ross [at Wisconsin] asking him what the "replacing birth rate" was. I was set to work to get the answer ["At that time Willcox was unfamiliar with the answers already provided by Lotka and Kuczynski," Ryder on "Notestein," op.cit., p. 6]. At that time I didn't know there was a census. I worked on getting the net reproduction rate. This was just before Lotka published on stable population. I got excited. By contrast with economics, you could go to the library and work like the dickens and be quite sure that you were ahead of where you were three weeks ago; you'd found something out. Suddenly it dawned on me that births, deaths, movement of homes, marriage, these were vital events, that everything in the economy and society focused on it. And it had a central core of arithmetic, mathematical rigor. I began to say, "Why am I fooling around with other things?" It was an exciting way of looking at the world. I'm afraid it wasn't from a reformist point of view that I got into it; just the sheer joy of watching the variables behave.

LUNDE: That's what happened to me. I was interested in cultural aspects, studying the development of the arts in America, starting with music from the grassroots. I did a study at Columbia on this, starting out by studying the control of music, from the musician's view. While I was at school, I became involved in population studies and Kingsley Davis [PAA President 1962-63] came to Columbia and he stimulated me. It was something that was measurable, real, and yet had social significance.

NOTESTEIN: Well, I thought it was an exciting deal. Now, there were some other fortuitous things. Willcox was statistical adviser to the Milbank Fund. He got the Fund to commission me to look into the claims they made that health demonstrations they were running had reduced the tuberculosis death rate in Cattaraugus County [New York]. I came up with the conclusion that they hadn't. But they hired me to look into vital statistics in Syracuse and Cattaraugus County and I got some data for them and also for my [Ph.D.] thesis. Then I went on to a Social Science Research Council fellowship on occupational mortality, with which I never did anything.

LUNDE: Willcox was a very fine person from all I hear. Lived to a ripe old age.

NOTESTEIN: A hundred and three!

LUNDE: I met his son in Washington some years ago.

NOTESTEIN: Dean of the Johns Hopkins School of International Studies; did well. I think Willcox and his son are the only two emeritus--father and son emeriti--who were for some years at Cornell. Willcox wouldn't let me do mathematics; you had to sneak off [to do that]. What Willcox had was extraordinary respect for the data and the virtues of knowing the material. And then a simple explanation. I found him exciting in the sense that he saw you into a problem and then listened to you. I found out that listening is a very great part of instruction; a little nudge here and a push there.

LUNDE: Frank, I want to help you very much for your help in this. Your reminiscences are simply marvelous.



Frank W. Notestein, 1902-1983

Author(s): Ansley J. Coale

Source: *Population Index*, Spring, 1983, Vol. 49, No. 1 (Spring, 1983), pp. 3-12

Published by: Office of Population Research

Stable URL: <http://www.jstor.com/stable/2737137>

JSTOR is a not-for-profit service that helps scholars, researchers, and students discover, use, and build upon a wide range of content in a trusted digital archive. We use information technology and tools to increase productivity and facilitate new forms of scholarship. For more information about JSTOR, please contact support@jstor.org.

Your use of the JSTOR archive indicates your acceptance of the Terms & Conditions of Use, available at <https://about.jstor.org/terms>



Office of Population Research is collaborating with JSTOR to digitize, preserve and extend access to *Population Index*

JSTOR



FRANK W. NOTESTEIN
1902-1983

CURRENT ITEMS

FRANK W. NOTESTEIN, 1902-1983

Frank W. Notestein, who died on February 19, 1983, not only played a key role in the development of demography in the United States but also played a major part in the history of Population Index. The Office of Population Research at Princeton University was founded in 1936 under his leadership, and the same year, the two-year-old Index moved from Washington to Princeton, where it has found its permanent home. For many years, he shared editorial responsibility with Irene Taeuber, Louise Kiser, and Dorothy Good, and the continuing bibliographic service the Index has been able to provide the demographic community is in no small way due to his care and support. As a token of our appreciation, we are publishing in this issue a comprehensive bibliography of his work and a biographical note prepared by Ansley Coale for the International Encyclopedia of the Social Sciences. It is fitting that this issue also contains a citation to his last contribution, "The development of demography in the United States", published in the December 1982 issue of the Population and Development Review.

The Editors

Biography*

Frank W. Notestein was born on August 16, 1902, and retired from his last full-time position in 1968. During these 66 years, demography developed from a subject of occasional notice by statisticians and economists to a flourishing discipline with its own journals, research organizations, and national and international professional societies. This coincidence in timing between Notestein's career and the growth of demography is not wholly accidental. The ideas he contributed are at the core of modern thinking about population; he was the first to introduce a program of research and graduate training at an American university, and he instilled a scientific attitude and professional competence in a long list of advanced students from many countries. He also created, or helped to create, several of the institutions that provide leadership in scholarship, the formation of policy, and technical assistance in matters relating to population.

One can never judge what would have happened if a particularly creative person had not existed; it is always possible that his accomplishments would have emerged from other hands. Thus there are two interpretations of what Notestein has contributed to the better understanding of human populations: either he has been an indispensable catalyst, who greatly accelerated the development of the field, or he was fortunate enough repeatedly to be the right man at the right place at the right time.

*Reprinted with permission of the publishers of the International Encyclopedia of the Social Sciences: Bibliographical Supplement, David L. Sills, Editor. Copyright © 1979 by the Free Press, a Division of Macmillan Publishing Company.

Although he was born and raised in Alma, Michigan, Notestein's family background is too intellectual by far to be considered typical of a small midwestern town. His father, Frank Newton Notestein, was a professor of mathematics and dean of the faculty of Alma College; and his grandfather, Isaac Notestein, taught at an academy that his great-grandfather, Jonas Notestein, had founded. His mother, Mary Elizabeth Wallace, was the daughter of a generous founding contributor to Wooster College.

Frank Notestein spent his freshman year at Alma College, but he transferred to Wooster College to study economics. Upon his graduation in 1923, he entered Cornell University. In his last year at Wooster, he became engaged to his classmate, Daphne Limbach. They were married four years later when Notestein completed his thesis, for which she drew the charts.

The dominant figure in economics at Cornell in the 1920s was Herbert J. Davenport, an outstanding exponent of the neoclassical utilitarian theory of value and price, which Notestein found uncongenial because he thought it tautological and futile. He respected the rigor of Davenport's thinking and the skill of his teaching, and apparently Davenport supported Notestein with enthusiasm in spite of their differences. Notestein found the more institutional and empirical approach of Morris Copeland (then an assistant professor) more congenial. The professor at Cornell who influenced Notestein the most was Walter F. Willcox, who taught statistics and sociology. Willcox, who had developed an interest in statistics after his own formal graduate training was completed, did not know mathematics or modern statistics. For training in statistics, Notestein had to take work with Frank A. Pearson at the College of Agriculture. Willcox did appreciate the value of simplicity, and the importance of knowing one's basic data, attitudes that Notestein later implanted in his own graduate students and that his own work always reflected.

Willcox was an adviser to the Milbank Memorial Fund, which was claiming success in dropping the death rate from tuberculosis in Catteraugus County, New York, an area the fund had selected for health demonstrations. Willcox asked Notestein (while the latter was still a graduate student) to review these claims. To the annoyance of the head of the fund, Notestein found that death rates from tuberculosis were dropping about as fast in control counties, with no special program, as in Catteraugus. A short time later Edgar Sydenstricker joined the fund, having just completed pioneering statistical work in the U.S. Public Health Service and the League of Nations. Sydenstricker offered Notestein a summer job compiling historical vital statistics for Catteraugus and Syracuse counties. These data formed the basis of Notestein's Ph.D. thesis.

With the thesis completed the Notesteins sailed to Europe where he had a one-year Social Science Research Council fellowship to study occupational mortality in London, Frankfurt, and Geneva. Just before the fellowship was to end, Notestein was offered a job at the Milbank Memorial Fund. In the fall of 1928, as a research associate, he began a study of differential fertility by occupational class.

In his years at the Milbank Fund (1928-1936) Notestein began to formulate some of his most influential contributions to demographic thought. These contributions yielded a better understanding of the large reduction in birth and death rates that had occurred in the nineteenth and early twentieth centuries in the economically and technologically more advanced countries. Notestein foresaw, before almost anyone else, that a similar transformation would occur if and when the less advanced areas experienced economic and technological progress.

In the 1920s and 1930s there was still disagreement between biologists and biometricians (such as Raymond Pearl and Corrado Gini) who thought that population trends responded mostly to biological influences, especially population density, and social scientists who looked for social explanations for the decline in fertility that was evident throughout Europe, North America, Australia, New Zealand, and Japan. The social scientists in turn were divided between those like William Fielding Ogburn and Henry Pratt Fairchild, who attributed the decline in fertility and class differences in fertility to the diffusion of effective contraceptive technology throughout society, beginning within the more educated and better informed urban upper classes and gradually spreading to less educated, lower socioeconomic categories, and those like René Dumont, LeRoy Beaulieu, and Alfred Landry, who

emphasized the changing attitude toward procreation in societies less dominated by tradition, more open to social advancement, providing more opportunities for women outside the home, and with newly established traditions (and laws) of universal education.

Notestein's particular contribution was to use direct evidence to show the importance of attitude rather than biology or contraceptive technique. He analyzed the records he gathered in a follow-up study of patients from the Margaret Sanger Clinic in New York (Stix and Notestein 1940). This study showed that after allowance for gross pathology, there were no significant group differences in conception rates in the absence of contraception, and that in the absence of contraception twentieth-century American women would have had birth rates as high as any on record. Most significantly, they found that coitus interruptus was widely used in pre- and postclinic experience, and was quite effective. Another piece of empirical information was derived from an experiment conducted by Gilbert Beebe in an Appalachian coal mining area with the support of the Milbank Fund. Beebe made a simple contraceptive method available and found some accepters, but there was no detectable residual effect in a follow-up three years later.

From these observations Notestein concluded that it had been a change in attitude, not technological invention alone, that had led to lower rates of childbearing. Enhanced motivation to restrict fertility could just as well be called the cause of modern methods as modern methods could be called the cause of the restriction. Clearly both were important. These inferences from the analysis of the records of birth control clinics led Notestein to a clearer and more soundly based statement of "the demographic transition" than the earlier formulations by Dumont, Beaulieu, Landry, Charles P. Blacker, and Warren S. Thompson. Notestein's first statement appeared in chapter 15 of Controlled Fertility (Stix and Notestein 1940); his most fully developed version is contained in "Economic Problems of Population Change" (1953).

Notestein perceived at an early date that the relation between social change and population trends (the demographic transition) that he and others found in the history of the economically more advanced countries created a potential for very rapid growth in the less developed countries. His graduate students before World War II learned that the expected effect of economic progress in areas such as India or Indonesia was a reduction in the death rate long before there was any fall in the birth rate, and a resultant period of very rapid increase in population. Because some of the areas in which rapid growth was a prospect were very poor and already very densely settled, he feared that these demographic tendencies would themselves be an impediment to progress (Notestein 1944; 1945). These prophetic ideas were published long before most of the world had any notion that an explosive growth of numbers in the less developed countries was about to begin. A special instance of his foresight was his study of population problems in Palestine (Notestein and Jurkat 1945). Notestein and his colleague Jurkat noted that although the current rates of increase were about the same for Jews and Arabs, the potential for growth was much greater for the Arab populations. The Jews were rapidly increasing in number because new migrants had brought a concentration of young adults of childbearing age. Their lifetime reproductive behavior, however, was European, not Asian. The death rates of the Arabs were falling rapidly as a result of the new prosperity and health programs of the British Mandate established by the League of Nations, but their birth rates were high because of the continuation of traditional attitudes and practices. Notestein was asked to testify before the Anglo-American Commission on the Future of Palestine. Years later the attorney for the Zionists told him that his testimony had helped the Jewish leaders decide in favor of the partition of Palestine.

The most distinctive feature of Notestein's career is his quiet success in building institutions of exceptional quality and influence, most notably the Office of Population Research at Princeton University, the Population Division of the United Nations, and the Population Council.

The Office of Population Research was founded in 1936 when Notestein came to Princeton from the Milbank Memorial Fund to become the first director of the office. It was the first university-based unit for research and graduate training in demography, and began with its director, a secretary, a research assistant, and a graduate student who held a newly established Milbank Memorial Fund fellowship. Although it never had a very large staff (a maximum

of 10 or 12 professional demographers; at most times fewer), the office established a solid reputation for innovative work on diverse aspects of demography: the causes and consequences of population trends, particular studies of the population of many countries and regions, contributions to formal and mathematical demography, methods of measurement and projection, and analytical and empirical research on fertility, mortality, nuptiality, and age structure. The staff that Notestein recruited over the years at Princeton--among them Irene Taeuber, Frank Lorimer, Dudley Kirk, Kingsley Davis, John Hajnal, Robert Potter, and Charles Westoff--and the students he trained--among them John Durand, Norman Ryder, Harvey Leibenstein, Alvaro Lopez, and Paul Demeny--would find a place in any history of the development of the modern study of population. Both colleagues and students were in some degree infected by his skepticism, respect for evidence, and insistence on rigor and technical competence.

In 1946 Notestein, on half-time leave of absence from Princeton for two years, helped to establish, as its first director, the Population Division of the United Nations. He somehow succeeded in having fact-gathering and scientific analysis accepted as major functions of the division, in spite of the usual predominance of procedural and political matters within the large bureaucracy of the United Nations Secretariat. He fostered within the division the standards of preciseness and objectivity that he tried to maintain at the Office of Population Research. Partly as the result of the impetus he gave to the division, some of the world's leading demographers have served with it and they have made discoveries and enriched the literature with some of the most important contributions of the period.

The Population Council cannot be counted as Notestein's creation. It was founded in 1952 by John D. Rockefeller, 3d, who assumed the presidency of this small organization limited at first to modest support for demographic research, biomedical research on human reproduction, and providing fellowships for advanced training both in demography and the biomedical field, primarily to candidates from less developed countries. The next president of the council, Frederick Osborn, shares with Notestein an outstanding record of successful promotion and statesmanship in demography. When Osborn retired in 1959, Notestein succeeded him as president of the council.

Notestein came to the Population Council at an opportune moment. In its early years most of its funds were personal contributions by John Rockefeller, but by 1959 it was receiving support from the Ford and Rockefeller foundations.

In 1959, and for the first few years of Notestein's presidency of the council, the United States government and the United Nations were still barred from technical assistance in family planning, and the Population Council was the only organization in the world from which countries could ask for help.

Under these conditions, and with Notestein's leadership, the Population Council became a critical component in the expansion of technical assistance, in the extension of training both in demography and the biomedical aspects of reproduction, and in the development of these two scientific fields. It was of great assistance in launching family planning programs in South Korea, Taiwan, and many other countries. It set up systems of continuing evaluation of these programs that were effective and have been useful models for others. The biomedical research program at the council provided intellectual leadership in an area that in 1959 had few resources in money or personnel. Now that financial support is on a much larger scale, and many laboratories are working in the field, the council program is still influential. An instance of the practical impact of this program is its funding (about 95 percent) of the development of the intrauterine contraceptive device. In 20 years the cumulative number of Population Council fellows reached approximately 1,400, of whom 1,150 were from Asia, Africa, and Latin America. A substantial fraction of the professional demographers in the less developed countries are Population Council fellows. Other, larger programs financed by governments are building on the foundations established by the Population Council.

Ansley J. Coale

Bibliography

- Notestein, Frank W. (1933).
The Differential Rate of Increase among the Social Classes of the American Population. *Social Forces* 12:17-33.
- Notestein, Frank W. Kiser, Clyde V. (1934).
Fertility of the Social Classes in the Native White Population of Columbus and Syracuse. *Human Biology* 6:595-611.
- Notestein, Frank W. Kiser, Clyde V. (1935).
Factors Affecting Variations in Human Fertility. *Social Forces* 14(1):32-41.
- Sydenstricker, Edgar. Notestein, Frank W. (1935).
Some Recent Studies on Differential Fertility in the United States. *Bulletin de l'Institut International de Statistique* 28(2):82-92.
- Notestein, Frank W. (1936).
Class Differences in Fertility. *Annals of the American Academy of Political and Social Science* 188:26-36.
- Notestein, Frank W. (1936).
The Fertility of Populations Supported by Public Relief. *Milbank Memorial Fund Quarterly* 14:37-49.
- Notestein, Frank W. Chiao, Chi-ming. (1937).
Population. In *Land Utilization in China*, by J. Lossing Buck, Vol. 1, pp. 358-399. Nanking: University of Nanking.
- Notestein, Frank W. (1938).
A Demographic Study of 38,256 Rural Families in China. *Milbank Memorial Fund Quarterly* 16:57-79.
- Notestein, Frank W. (1938).
Differential Fertility in the East North Central States. A Preliminary Analysis of Unpublished Tabulations from the Family Cards of the 1930 Census. *Milbank Memorial Fund Quarterly* 16:173-191.
- Notestein, Frank W. (1938).
The Importance of Population Trends to the Birth Control Movement. *Birth Control Review* 22:76-78.
- Notestein, Frank W. (1939).
Intrinsic Factors in Population Growth. *Proceedings of the American Philosophical Society* 80:499-511.
- Notestein, Frank W. (1939).
Some Implications of Current Demographic Trends for Birth Control and Eugenics. *Journal of Heredity* 30:121-126.
- Stix, Regine K. Notestein, Frank W. (1940).
Birth Control and Population Trends. In *Controlled Fertility: An Evaluation of Clinic Service*, edited by Regine K. Stix and Frank W. Notestein, pp. 144-158. Baltimore: Williams and Wilkins.
- Stix, Regine K. Notestein, Frank W. (1940).
Controlled Fertility: An Evaluation of Clinic Service. Baltimore: Williams and Wilkins. 202 pp.
- Notestein, Frank W. (1942).
The Significance of Population Trends. In *Preventive Medicine in Modern Practice*, issued by the New York Academy of Medicine, Committee on Public Health Relations, pp. 28-50. New York: Hoeber.

- Notestein, Frank W. (1943).
Redistribution of U.S. Population, 1940-1942. *Population Index* 9(1):2-4.
- Notestein, Frank W. (1943).
Some Implications of Population Change for Post-War Europe. *Proceedings of the American Philosophical Society* 87:165-174.
- Notestein, Frank W. (1944).
Fundamentals of Population Change in Europe and the Soviet Union. In *Compass of the World: A Symposium of Political Geography*, edited by Hans W. Weigert and Vilhjalmur Stefansson, pp. 429-442. New York: Macmillan.
- Notestein, Frank W. (1944).
Future Populations. *Population Index* 10(1):3-13.
- Notestein, Frank W. (1944).
Population and Power in Postwar Europe. *Foreign Affairs* 22:389-403.
- Notestein, Frank W. (1944).
Problems of Policy in Relation to Areas of Heavy Population Pressure. *Milbank Memorial Fund Quarterly* 22:424-444.
- Notestein, Frank W. Taeuber, Irene B. Kirk, Dudley. Coale, Ansley J. Kiser, Louise K. (1944).
The Future Population of Europe and the Soviet Union: Population Projections, 1940-1970. *League of Nations Publications, II, Economic and Financial. 1944.II.A.2.* Geneva: League of Nations. 315 pp.
- Notestein, Frank W. (1945).
A Generation's Change in Human Fertility in the United States. *Population Index* 11(1):3-7.
- Notestein, Frank W. (1945).
International Population Readjustments. *Proceedings of the Academy of Political Science* 21:222-238.
- Notestein, Frank W. Jurkat, Ernest J. (1945).
Population Problems of Palestine. *Milbank Memorial Fund Quarterly* 23:307-352.
- Notestein, Frank W. (1945).
Population--The Long View. In *Food for the World*, edited by Theodore W. Schultz, pp. 36-57. Chicago: University of Chicago Press.
- Notestein, Frank W. (1946).
The Facts of Life. *Atlantic* 177:75-83.
- Notestein, Frank W. (1947).
International Population Problems. *United Nations Weekly Bulletin* 3:432-433.
- Taeuber, Irene B. Notestein, Frank W. (1947).
The Changing Fertility of the Japanese. *Population Studies* 1:2-28.
- Notestein, Frank W. (1947).
The Changing World Population. In *The Scientists Speak*, edited by Warren Weaver, pp. 294-298. New York: Boni and Gaer.
- Notestein, Frank W. (1948).
Summary of the Demographic Background of Problems of Undeveloped Areas. *Milbank Memorial Fund Quarterly* 26:249-255.
- Notestein, Frank W. (1949).
Notes on the Report of the Royal Commission on Population (Great Britain). *Population Index* 15(4):304-311.

- Notestein, Frank W. (1949).
The Report of the Royal Commission on Population: A Review. *Population Studies* 3:232-240.
- Notestein, Frank W. (1950).
Demographic Work of the United Nations. *Population Index* 16(3):184-193.
- Notestein, Frank W. Taeuber, Irene B. Balfour, Marshall C. Evans, Roger F. (1950).
Public Health and Demography in the Far East. Report of a Survey Trip, September 13-December 13, 1948. New York: Rockefeller Foundation. ii, 132 pp.
- Notestein, Frank W. (1950).
The Analysis of International Population Problems. In *International Demographic Statistics and Population Problems, United Nations World Statistical Congress, September 6-18, 1947, Vol. 2*, edited by William J. Bruce, pp. 215-235. Calcutta.
- Notestein, Frank W. (1950).
The Population of the World in the Year 2000. *Journal of the American Statistical Association* 45:335-345.
- Notestein, Frank W. (1950).
The Reduction of Human Fertility as an Aid to Programs of Economic Development in Densely Settled Agrarian Regions. In *Modernization Programs in Relation to Human Resources and Population Problems*, issued by the Milbank Memorial Fund, pp. 89-100. New York: Milbank Memorial Fund.
- Notestein, Frank W. (1951).
Policy of the Indian Government on Family Limitation. *Population Index* 17(4):254-263.
- Notestein, Frank W. (1951).
Population. *Scientific American* 185:28-35.
- Notestein, Frank W. (1951).
The Needs of World Population. *Bulletin of the Atomic Scientists* 7:99-101.
- Notestein, Frank W. (1952).
Comment. In *A Survey of Contemporary Economics, Vol. 2*, edited by Bernard F. Haley, pp. 128-129. Homewood, Ill.: Irwin.
- Notestein, Frank W. (1952).
Population Trends in the United States. In *Facing the Future's Risks: Studies toward Predicting the Unforeseen*, edited by Lyman Bryson, pp. 146-173. New York: Harper.
- Notestein, Frank W. (1952).
Procesos y Problemas del Cambio Poblacional. In *Memorias de la Sexta y Septima Convención de Trabajo Social de Puerto Rico*, pp. 69-74. San Juan.
- Notestein, Frank W. (1952).
The Needs of World Population. In *World Population and Future Resources: The Proceedings of the Second Centennial Academic Conference of Northwestern University, Evanston, Ill., March 1951*, edited by Paul K. Hatt, pp. 55-68. New York: American Book Co.
- Notestein, Frank W. (1953).
Class Differences in Fertility. In *Class, Status and Power: A Reader in Social Stratification*, edited by Reinhard Bendix and Seymour M. Lipset. Glencoe, Ill.: Free Press.

- Notestein, Frank W. (1953).
Economic Problems of Population Change. In Proceedings of the Eighth International Conference of Agricultural Economists, pp. 13-31. London: Oxford University Press.
- Notestein, Frank W. (1954).
Population Problems. *International Journal* 9:16-23.
- Notestein, Frank W. (1954).
Some Demographic Aspects of Aging. *Proceedings of the American Philosophical Society* 98:38-45.
- Notestein, Frank W. (1955).
Gaps in Existing Knowledge of the Relationships between Population Trends and Economic and Social Conditions. E/CN.9/119. New York: United Nations, Economic and Social Council. 18 pp.
- Notestein, Frank W. (1955).
The Birth Rate Subsidies in Western Europe. *Population Index* 21(2):76-77.
- Notestein, Frank W. (1956).
The Impact of Anticipated Trends and Shifts of Population upon American Agriculture. In Proceedings of Agricultural Industries Conference, Cornell University, Graduate School of Business and Public Administration, June 21st through June 23rd, 1956, pp. 28-42. Ithaca, N.Y.: Cornell University.
- Notestein, Frank W. (1957).
As the Nation Grows Younger. *Atlantic Monthly* 200:131-136.
- Notestein, Frank W. Mishler, Elliot G. Potter, Robert G., Jr. Westoff, Charles F. (1958).
Pretest Results of a New Study of Fertility in the United States. *Bulletin de l'Institut International de Statistique* 36:154-164.
- Notestein, Frank W. (1958).
Regional Population: Trends and Prospects. In *Population and World Politics*, edited by Philip M. Hauser, pp. 38-45. Glencoe, Ill.: Free Press.
- Notestein, Frank W. (1959).
Knowledge, Action, People. *Princeton Alumni Weekly* 60:8-11.
- Notestein, Frank W. (1959).
Poverty and Population. *Atlantic Monthly*, November issue, pp. 84-87.
- Notestein, Frank W. (1960).
Abundant Life. In *Population Growth and Economic Development with Special Reference to Pakistan: Summary Report of a Seminar September 8-13, 1959*, edited by M. L. Qureshi, pp. 318-325. Karachi, Pakistan: Institute of Development Economics.
- Notestein, Frank W. (1960).
Mortality, Fertility, the Size-Age Distribution and the Growth Rate. In *Demographic and Economic Change in Developed Countries, a Conference of the Universities-National Bureau Committee for Economic Research*, issued by the National Bureau of Economic Research, pp. 261-284. Princeton: Princeton University Press.
- Notestein, Frank W. (1962).
7 Billion People by the Year 2000. *Foreign Agriculture* 26(7):3-4.
- Notestein, Frank W. (1963).
World Population Trends. In *U.S. Department of Agriculture, World Food Forum Proceedings*, pp. 74-79. Washington: U.S. Department of Agriculture.

- Notestein, Frank W. (1965).
Keynote Address. In *Population Dynamics: International Action and Training Programs*. Proceedings of the International Conference on Population, May, 1964, the Johns Hopkins School of Hygiene and Public Health, edited by Minoru Muramatsu and Paul A. Harper, pp. 3-10. Baltimore: Johns Hopkins Press.
- Notestein, Frank W. (1965).
World Population Determinants in the Future. In *World Population and Food Supplies, 1980: A Symposium Sponsored by the American Society of Agronomy*, pp. 23-30. ASA Special Publication, No. 6. Madison, Wis.: American Society of Agronomy.
- Notestein, Frank W. (1966).
Population Growth--A Challenge to Public Health. *American Journal of Public Health and the Nation's Health* 56(1, Part 2):80-84.
- Notestein, Frank W. (1966).
Some Aspects of Population Change in the Developing Countries. In *3 Talks on Population Delivered before the First Pan-American Assembly on Population* (Cali, Aug. 1965), pp. 11-21. New York: Columbia University, American Assembly.
- Notestein, Frank W. (1966).
Some Economic Aspects of Population Change in the Developing Countries. In *Population Dilemma in Latin America*, edited by J. Mayone Stycos and Jorge Arias, pp. 86-100. Washington: Potomac Books (for) Columbia University, American Assembly.
- Notestein, Frank W. (1967).
Change, Choice and Responsibility in Relation to Population Growth. *Alma College Perspective* 3(2):19-26.
- Notestein, Frank W. (1967).
The Population Crisis: Reasons for Hope. *Foreign Affairs* 46(1):167-180.
- Notestein, Frank W. (1968).
The Population Council and the Demographic Crisis of the Less Developed World. *Demography* 5(2):553-560.
- Notestein, Frank W. (1969).
Frederick Osborn: Demography's Statesman on His Eightieth Spring. *Population Index* 35(4):367-371.
- Notestein, Frank W. (1969).
Population Growth and Its Control. In *Overcoming World Hunger*, edited by Clifford M. Hardin, pp. 9-39. Englewood Cliffs, N.J.: Prentice-Hall (for) Columbia University, American Assembly.
- Notestein, Frank W. Kirk, Dudley. Segal, Sheldon. (1969).
The Problem of Population Control. In *The Population Dilemma*, 2nd ed., edited by Philip M. Hauser, pp. 139-167. Englewood Cliffs, N.J.: Prentice-Hall (for) Columbia University, American Assembly.
- Notestein, Frank W. (1970).
Zero Population Growth. *Population Index* 36(4):444-452.
- Notestein, Frank W. (1970).
Zero Population Growth: What Is It? *Family Planning Perspectives* 2:20-24.
- Notestein, Frank W. (1971).
Reminiscences: The Role of Foundations, the Population Association of America, Princeton University and the United Nations in Fostering American Interest in Population Problems. *Milbank Memorial Fund Quarterly* 49:67-84.

- Notestein, Frank W. (1971).
Zero Population Growth: What Is It? In *The American Population Debate*, edited by Daniel Callahan, pp. 31-43. Garden City, N.Y.: Doubleday.
- Notestein, Frank W. (1972).
Zero Population Growth. In *Issues, Debates and Controversies*, edited by George Ritzer, pp. 396-405. Boston: Allyn and Bacon.
- Notestein, Frank W. (1973).
The Quest for Optimal Patterns of Demographic, Economic and Social Development. Costs and Benefits of Population Growth and Population Programs. World Population Conference, 1974, Symposium on Population and Development, Cairo, 4-14 June 1973. Item 7 of the Provisional Agenda. E/CONF.60/SYM.I/8. New York: United Nations, Economic and Social Council. 10 pp.
- Notestein, Frank W. (1974).
Economic Development Would Be Helped by a Reduction of Fertility. *UNESCO Courier*.
- Notestein, Frank W. (1974).
The World Population Year. *Population Index* 40(1):18-21.
- Notestein, Frank W. (1975).
Negative Population Growth: How to Go About It? *Population Index* 41(4):567-569.
- Notestein, Frank W. (1975).
Population Policy and Development: A Summary View. In *The Population Debate: Dimensions and Perspectives*. Papers of the World Population Conference, Bucharest, 1974, Vol. 1, pp. 538-542. *Population Studies*, No. 57. ST/ESA/SER.A/57. New York: United Nations, Department of Economic and Social Affairs.
- Notestein, Frank W. (1975).
William H. Draper, Jr. 1894-1974. *Population Index* 41(1):28-29.
- Notestein, Frank W. (1976).
Population, Growth and Movements Of. In *Dictionary of American History*, pp. 361-364. New York: Scribner's Sons.
- Notestein, Frank W. (1977).
Demografia. In *Enciclopedia del Novecento*, Vol. II, pp. 89-101. Rome: Istituto dell'Enciclopedia Italiana.
- Notestein, Frank W. (1978).
John D. Rockefeller 3rd: A Personal Appreciation. *Population and Development Review* 4:501-508.
- Notestein, Frank W. (1982).
Demography in the United States: A Partial Account of the Development of the field. *Population and Development Review* 8(4):651-687.

Frank Notestein did not give a presidential address at the 1948 annual meeting at the University of Pennsylvania. Instead, he hosted an informal discussion by Alberto Arca Parró (Peru), Alfred Sauvy (France), Germano Jardim (Brazil), and Philip M. Hauser (United States). However, this paper, published in that same year, offers insight into what he was thinking at the time.

Summary of the Demographic Background of Problems of Undeveloped Areas

Author(s): Frank W. Notestein

Source: *The Milbank Memorial Fund Quarterly*, Jul., 1948, Vol. 26, No. 3 (Jul., 1948), pp. 249-255

Published by: Wiley on behalf of Milbank Memorial Fund

Stable URL: <http://www.jstor.com/stable/3348232>

JSTOR is a not-for-profit service that helps scholars, researchers, and students discover, use, and build upon a wide range of content in a trusted digital archive. We use information technology and tools to increase productivity and facilitate new forms of scholarship. For more information about JSTOR, please contact support@jstor.org.

Your use of the JSTOR archive indicates your acceptance of the Terms & Conditions of Use, available at <https://about.jstor.org/terms>



Milbank Memorial Fund and Wiley are collaborating with JSTOR to digitize, preserve and extend access to *The Milbank Memorial Fund Quarterly*

JSTOR

SUMMARY OF THE DEMOGRAPHIC BACKGROUND OF PROBLEMS OF UNDEVELOPED AREAS

FRANK W. NOTESTEIN¹

THE problem of modernizing undeveloped areas may be usefully approached from the point of view of population changes for two reasons: (1) It is from the demographic point of view that the interrelated nature of social, economic, and political change is most apparent in long-range perspective; and (2) for a large proportion of the world it is the impact of economic and social change on population growth that presents one of the major obstacles to modernization.

The purpose of this introductory note is to serve as a background for the following papers by indicating briefly, even dogmatically, the nature of the impact of social and economic change on population growth, particularly in the undeveloped regions of dense settlement. In addition, some of the things that need to be done at the international level in the field of population studies will be suggested.

The common element in the demographic situation of undeveloped areas is the capacity of the population for rapid growth, given political stability and economic expansion. Some of the areas are sparsely settled, some are among the world's most densely populated regions; some have recently had declining numbers, others are growing slowly, and still others at a very rapid pace. In matters of density and current rates of growth there is no uniformity. The common characteristic is that, in virtually all, more stable government and economic development would produce a rapid and somewhat prolonged population increase.

There is no mystery about the rapid population growth that accompanies modernization in undeveloped areas. The process has been observed many times and the general principles are well understood. Societies with low levels of technical skill are

¹ Director, Office of Population Research, Princeton University, and Consultant-Director, Population Division, United Nations.

inevitably poor, ill-housed, ill-clothed, ill-fed, and subject to the uncontrolled ravages of disease. Such populations must have high birth rates to match their inevitably high death rates. Those that did not have high birth rates are no longer represented in the world. The very existence of such populations in the race of the toll of heavy mortality proves that the birth rates are high, and that the societies have developed the social structures essential to produce and maintain high birth rates.

Mortality can be quickly reduced from the high levels characteristic of most undeveloped areas without any substantial modifications of the social structure, at least in the initial stages. Political order, minimum efforts to control epidemics, rudimentary transportation, and slight improvements in the techniques of agriculture and industrial production bring death rates down with remarkable speed.

Human fertility, on the other hand, responds scarcely at all in the initial, and often superimposed, stages of such changes—changes that too often influence only the externals of life and leave the opportunities, hopes, fears, beliefs, customs, and social organization of the masses of the people relatively untouched. These latter are the factors that control fertility, and since they are unmodified, fertility remains high while mortality declines. Hence there is a substantial margin of population growth.

The small family pattern to which we are now accustomed in the Western world is not in any important degree due to the biological incapacity to reproduce. For that conclusion there is ample evidence. The change from the pre-modern levels of high fertility to the present-day small family of the Western world came about primarily from changes in the age at marriage, in the proportion marrying, and in the prevalence and effectiveness of the practice of birth control. It must be emphasized, however, that the decline in fertility requires more profound changes than the mere availability of the convenient contraceptive. Whether or not a population restricts its fertility severely (and every population restricts it in some degree) depends on the social organization, customs, and beliefs from

which arise the aspirations of its people with respect to family size. These matters, the heritage of past ages, lie at the core of the society and are scarcely modified by relatively small changes in government, in modes of production, and in sanitation.

The trend toward the small family in the West came typically in an urban setting. City life stripped the family of many of its functions. These functions were progressively filled by secondary groups in which the individual was in large measure on his own. Urbanization did much to weaken the ties of older beliefs and customs, and the community sanctions with which they were maintained. On the positive side, urban living gave the individual many opportunities for advancement on his own merits. In a word, the whole trend was away from the family and toward an individualistic life in a setting that put heavy pressure on a large family. As a result parents gradually sought to have only a few children to whom they could give opportunity for advancement. They came to adopt birth control in ever-growing numbers and came to practice it with increasing effectiveness. These changes, however, involved changes in man's deepest beliefs and such changes came slowly. The decline in the birth rates, therefore, came long after death rates began to drop. In the Western world birth rates have only recently come again into near balance with the death rates. It is the lag in the decline of fertility behind that of mortality which accounts for the epoch of population growth resulting from modernization. Europe's transition took approximately three hundred years and resulted in something like a sevenfold multiplication in the population of European extraction. There is no past transition that involved less than a century and less than a threefold multiplication of population.

It should be clear that there is nothing inevitable about the exact amount of time and the precise amount of growth involved in the demographic transition. Careful planning, particularly in the early stages, might speed the process and limit the amount by which the population expands. To put the prob-

lem in perspective, it may be over-dogmatically asserted that in many of the world's most densely settled regions a successful transition would limit growth to a doubling of the present population, without major intervening catastrophes.

In such regions the danger is that there will be only moderate economic and sanitary improvement unaccompanied by the social changes that affect fertility. Such social changes will be difficult to achieve unless economic development is rapid enough to lift the level of living in spite of substantial population increase. If gains in production only match those in population growth, "improvement" may result principally in ever larger masses of humanity living close to the margins of existence and vulnerable to every shock in the world economic and political structure. Such "progress" may amount to setting the stage for calamity. Much of Asia seems to be perilously close to this situation.

All of the foregoing is an old story to demographers, but it may help those not primarily concerned with population trends to consider a few illustrations. In such areas as Formosa, the Philippines, Java, and Korea there has been considerable economic development in the past decades. This development has been primarily agricultural and has done rather little to change the structure of the societies. Birth rates have remained substantially unaffected, but stable government and improved productive techniques in agriculture, coupled with a little sanitation, have cut the death rates. Before the war the populations were growing at rates between 2 and 3 per cent a year (3 per cent per annum doubles a population in twenty-three years). The results were mounting densities, ever narrowing bases for future economic development, and populations whose capacity for future growth remained unimpaired.

No more striking illustration of the limitations, from the demographic point of view, of "good government and economic development" can be given than the case of Java. Since 1860 under an efficient regime marked advances have been made in sanitation and in agricultural production. Between 1860 and

1930 the population increased threefold. By 1930 there were more than 800 persons per square mile. Yet there is no evidence of substantial improvement in the level of living of the mass of the population, and the limits within which agricultural production can be extended were becoming narrow. The customary way of life changed rather little, and there was little indication of the sort of changes that presage a decline in fertility. If past rates of increase are to continue unchecked, the problem of supporting more than 1,500 people per square mile will have to be faced by the year 2000. The case is an extreme one because few areas have been as "well managed"; but the principles are characteristic of much in the Asiatic situation.

It should not be supposed from the foregoing that we may expect rapid population growth in Asia. The growth will be large because the base populations are large. It will not necessarily be rapid. Fertility is ample to yield rapid growth if low death rates can be attained. Whether they can be attained for a substantial period of time depends in large measure on whether economic development can come rapidly enough to forestall catastrophes. A sober consideration of the existing situation leads one to expect that catastrophes will in fact check rapid growth. It points to the urgency of rapid economic development on a broad front to forestall such tragedy. It also points to the urgency of giving attention in regional planning to those changes which bring pressure on the birth rate. Today's problem arises in large part from the absence of such planning in the vast agricultural development of these regions. It is clear that in the long run high birth rates are incompatible with low death rates.

With this slight background we may turn very briefly to a few of the things that are needed if international population problems are to be dealt with constructively.

First of all, we need to know how to reduce birth rates in an agrarian society. The problem is too urgent to permit us to await the results of gradual processes of urbanization, such as took place in the Western world. We need to know more about

the causes of the decline of the birth rate in rural France in the early nineteenth century, and in Eastern Europe between the wars. We need concrete experiments in the processes of social change in peasant populations with high fertility.

We also need increased knowledge of the physiology of reproduction. The problem of the voluntary control of fertility when the individual incentives for such control are not strong may prove insoluble with available methods. It is quite possible that an expansion of fundamental knowledge of the physiology of human reproduction would result in much simpler and more effective methods of contraception which would find more general acceptance.

It is also evident that there must be a much deeper understanding of the processes of population change if there are to be wise policies at the international level. At present much of the debate on population policies in international circles is on the ideological level. People are in favor of, or are opposed to, particular forms of birth control; in favor of, or opposed to, large migration; they are neo-Malthusian, or Marxist, or in opposition to both positions. All too seldom is there any appreciation of the complexity of the problems. Mutually incompatible policies are often advocated. Nor is there any adequate appreciation of the substantial latitude that each of the major ideologies provides for a common meeting ground in the formation of policy. There has been too much bandying of slogans, and too little careful study.

We need specific and careful studies of the interrelations of population, social, and economic change. The Population Commission of the United Nations has every prospect of making important contributions in this field. It has in general taken the view that its first obligation is to lay the appropriate analytical and factual foundations before entering upon the discussion of policies. One of its first requests was to call for the submission of a plan by which Member States can examine fruitfully the interrelation of demographic, social, and economic changes tending to hinder the attainment of an adequate stand-

ard of living and cultural development. The discussion of such plans, and still more their execution by a few Member States, should do much to clear up misunderstanding. It should go far toward demonstrating that wise policy in the field of human welfare is not segmented by the boundaries of the intellectual disciplines. The solution of the population problems of the world's undeveloped areas will require that demographic factors be taken into account in all planning for higher living levels, social welfare, and health. Moreover, unless solutions to the demographic problems are found, efforts to advance in these other fields may be self-defeating.