

# **DEMOGRAPHIC DESTINIES**

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

### **Interviews Referencing Rupert B. Vance PAA President in 1951-52**



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)

## **RUPERT B. VANCE**

We do not have an interview with Rupert Vance, who was the 15th PAA President (1951-52). However, as Andy Lunde and Jean van der Tak (VDT) were interviewing other past presidents, they regularly asked questions about those early presidents whom they had been unable to interview. Below are the excerpted comments about Rupert Vance.

### **CAREER HIGHLIGHTS**

Rupert Bayless Vance was born in 1899 in Plummerville, Arkansas. He contracted polio as a child, which decreased his physical mobility. He received his A.B degree from Henderson-Brown College in Arkansas, his master's degree in economics from Vanderbilt University and was awarded his Ph.D. from the University of Carolina, Chapel Hill, in 1928. He then joined the faculty at UNC as one of the first recruits for the new sociology department led by Howard Odum.. He remained at UNC for forty years, playing a leading role in the introduction of the sociological study of the South at the university's Institute of Research in Social Science, and serving as Kenan Professor of Sociology from 1945 until his retirement in 1969. In seven books and many other publications, Vance pioneered the new, more realistic analysis of the South that accounted for its economic and racial problems. He also suggested solutions for those problems and urged his fellow southerners to embrace progress. Later in his career, he concentrated on new statistical methods and demography. He served on the governing board of the University of North Carolina Press and was active in community work. In 1944, he was elected president of the American Sociological Association. He died in 1975 in Chapel Hill.

### **From Jean van der Tak's interview with Philip Hauser in 1988:**

**VDT:** And Rupert Vance, who came after you as PAA president. He was an extraordinary person too, I gather.

**HAUSER:** He was, in spite of his physical handicap. I never knew Vance very well. But from reading his works and what meetings I had with him and hearing him talk and give papers, I regarded Vance as one of the true emancipated intellectuals in the South. He was far advanced over many of his Southern colleagues. He perceived the world with breadth. Alongside of him, many other Southern faculty people were just parochials.

### **From Andy Lunde's interview with Clyde Kiser in 1973:**

**LUNDE:** To go back a moment, you were telling me earlier about your visit to the White House during the 1935 meeting and you said something about Rupert Vance being taken up in FDR's elevator. Tell us that story.

**KISER:** We were invited for tea, so immediately after the meetings in the Willard Hotel, we went over to the White House. Most of us started up the stairway there and a flunky came out and told Vance, who of course was on crutches, that they had an elevator for him. So they led him to a little elevator which Vance thought had been installed for President Roosevelt. This was the tea in 1935.

### **From Andy Lunde's interview with Henry Shryock in 1973:**

**LUNDE:** Are there early meetings that particularly stand out in your memory?

**SHRYOCK:** I don't think of any landmarks or watersheds. Offhand I can say I heard a great many

good papers over the course of the years, particularly by people like Frank Notestein, who was always a prescient speaker, and some delightful ones by Lorimer and Hauser and others.

I remember some interesting business meetings. One occurred I think at Princeton. I was secretary at that time [1950-53]; Rupert Vance was president [1951-52, and would have been president for the 17th annual meeting of April 19-20, 1952, in Princeton]. This was at the time when we were switching over from having the officers elected by the Board of Directors to being elected by the membership. Vance and some others--Dudley Duncan--thought of themselves as Young Turks in favor of this move. I was rather lukewarm. I was never one to think that organizations of this type benefited from maximum democratization. There were a number of people, maybe among the elder statesmen, who were not very keen on this and we got into a terrible parliamentary tangle. There seemed to be two schools of thought as to whether we should be following UN parliamentary rules or Robert's Rules of Order. I thought we were never going to get ahead.

**LUNDE:** Of course, it was decided to have the membership vote for the officers.

**SHRYOCK:** That's right. Now, of course, the membership also elects the nominating committee; again a move about which I'm not very enthusiastic.

**From the interview by Harry Rosenberg (substituting for Andy Lunde) of C. Horace Hamilton and Joseph Spengler in 1976:**

**INTERRUPTION.** Talking about Rupert Vance as tape resumes.

**SPENGLER:** One thing that always struck me about Rupert, you never could do anything whatever to help him. We were at VPI and he went up three flights of stairs to do a radio program. The only time Rupert would accept any assistance from me was when we were in Philadelphia, maybe when I was president [1957 PAA meeting, when Spengler was president, was in Philadelphia]. It was windy as hell; just bitter on that elevation. And I sheltered him because his circulation couldn't contend with that. That's the only time it was ever possible for me to extend any assistance.

Rupert introduced me when I made my presidential address ["Aesthetics of Population," published as a Population Bulletin of the Population Reference Bureau, June 1957].

**HAMILTON:** He gazed out over the audience and said, "I know this audience is a typical demographic table--all broken down by age and sex." That's funny. I can't remember your speech but I remember that. I never was much of a joke-teller but one of the great joys I always had was at these meetings and hearing Vance tell some off-color jokes.

**From Jean van der Tak's interview with Amos Hawley in 1988:**

**HAWLEY:** I became a member in 1945 and attended as many meetings as I could, depending on whether the university was paying expenses or not. I remember one particular one here at Chapel Hill in 1952, I think it was.

**VDT:** There was a meeting at Chapel Hill in 1951. Rupert Vance was the instigation for that.

**HAWLEY:** I had a paper there. And I attended several of the Princeton meetings.

**VDT:** What do you particularly remember about the Chapel Hill meeting?

**HAWLEY:** Well, one of the interesting aspects of the PAA in its early years was that it was a small group and ran one session at a time; everybody met in that one session. In the afternoon, there would be another meeting and everybody who was going to a meeting at all would go to that session. That was true of the meeting here at Chapel Hill. We stayed at the Carolina Inn. It was small, only half as big as it is now; it couldn't accommodate many people. Rupert Vance organized transportation from the airport. I think Dan Price discussed my paper at that meeting. It was on a migration study of Michigan movements. [Dan Price did indeed discuss Amos Hawley's paper on "Intrastate Migration in Michigan, 1935-1940," but this paper was presented at the 1952 meeting, in Princeton.]

**VDT:** All the notables were there to hear you.

**HAWLEY:** Everybody went to everything; had to listen. Dudley Kirk was there and the Taeubers, Dorothy Thomas, Warren Thompson and Whelpton.

**VDT:** Rupert Vance was elected president at that meeting and served from 1951 to 1952. He was followed by Clyde Kiser.



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Rupert Bayless Vance (1899-1975)

Author(s): Clyde V. Kiser

Source: *Population Index*, Vol. 41, No. 4 (Oct., 1975), pp. 570-571

Published by: Office of Population Research

Stable URL: <https://www.jstor.org/stable/2734846>

Accessed: 18-06-2020 21:43 UTC

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RUPERT BAYLESS VANCE  
1899-1975

Rupert Bayless Vance, president of the Population Association of America in 1951-1952, died on August 25, 1975 in

Chapel Hill, North Carolina. Dr. Vance was born in Plumerville, Arkansas, March 15, 1899. In 1902 he was afflicted with polio; although he was to walk on crutches thereafter, he got around remarkably well.

Vance received the A.B. degree at Henderson-Brown College in Arkansas in 1920, the A.M. at Vanderbilt in 1921, and the Ph.D. at the University of North Carolina in 1928. In 1930 he married Rheba Usher and is survived by her and their three sons, David, Donald, and Victor.

In 1926 Vance began his graduate studies at the University of North Carolina as a Ph.D. candidate. It was at this time that the careers of Howard W. Odum and Rupert Vance crossed. Odum had come to the University in 1920 to establish a Department of Sociology and Public Welfare. In 1922 Odum initiated the *Journal of Social Forces*, later renamed *Social Forces*, and in 1924 he established the Institute for Research in Social Science.

Vance had been attracted to the University by these developments and Odum was quick to realize that Vance was a real find. Vance was a teaching fellow during 1927-1928, a research associate during 1929-1937, a research professor during 1937-1944, and the Kenan Professor of Sociology from 1945 until his retirement in 1969.

Odum and Vance gained national prominence as regional sociologists. They and their colleagues did much to give national prominence to the Department and to the University. Vance's doctoral dissertation *Human Factors in Cotton Culture* (1929) was a curtain raiser for his more general *Human Geography of the South* (1932). This book, believed by this writer to be Vance's *magnum opus*, was followed by *All These People* (1945), *New Farm Homes for Old* (1946), *Exploring the South* (1949), and *Urban South* (1954).

Frank Lorimer and Frederick Osborn, in their *Dynamics of Population* (1934, p. 185) stated, "Rupert Vance . . . in *Human Geography of the South* (perhaps the best book yet written on the social and economic life of the South) has stated very clearly this drag of excessive fertility on educational progress in the rural South . . . Thus a vicious circle is apparent. *Retarded development fosters the maintenance of excessive fertility; and excessive fertility tends to retard economic and cultural development.*"

An editorial in *The Charlotte Observer* of August 28, 1975 stated "... Dr. Vance helped to make a revolution, one that still is sweeping across the South, changing economic, social and racial attitudes, opening opportunities and carrying the region into the mainstream of American life . . . His Studies . . . resulted in widespread efforts to overthrow what he called 'Colonial economy' that exploited the South's natural resources and its human potential. His work was largely responsible for Franklin Roosevelt's 1938 declaration that 'the South presents . . . the nation's No. 1 economic problem'." (p. 17A)

Vance was drawn into the agricultural, tenancy, racial, and educational problems of the South not only as a researcher and author, but also as a teacher and occasional witness at governmental committee hearings. He had a stock of pithy sayings gleaned from his conversations with white and black sharecroppers, laborers, and cab drivers and he frequently resorted to these in attempts to explain complex problems.

Yet Vance was strong for theory in sociology and demography. He held that theory is needed to give direction and guidance to research. At the 1952 meeting of the Population Association of America, his presidential address "Is Theory for Demographers?" was a strong statement in the affirmative. Himself a conventional analyst in studies of population redistribution, Vance applauded efforts at migration theory such as those of Samuel A. Stouffer and Talcott Parsons.

Vance co-edited *Social Forces* with Katharine Jocher from 1957-1961 and with Guy B. Johnson from 1961 until their joint retirement in 1969. Vance served on the editorial board of *Rural Sociology*, edited the University of North Carolina *News Letter*, and was a member of the governing board of the University of North Carolina Press.

In addition to being president of the Southern Sociological Society (1938) and the American Sociological Association (1944), Vance was a member of the Census Advisory Committee for the 1940 Census and a member of a committee to advise on applications for NIH research grants from 1950-1958. He did various types of research for the National Resources Committee, Social Security Board, Social Science Research Council, and the Rosenwald Fund. He received honorary degrees from Hendrix College in 1938, University of Arkansas in 1954, and from the University of North Carolina in May 1975.

Blessed with a keen and logical mind, good articulation, a strong voice, and a great sense of humor, Vance was a good lecturer and discussion leader. He inspired many of his students and colleagues to undertake research of their own and he was generous of his time in helping students with their problems.

Following a close association at Chapel Hill during 1926-1927, the writer and Vance had rather frequent contacts at conferences and committee meetings. Rupert was a loyal friend and a generous and witty person. Many of his friends like to trade instances of Vance's quips and repartees. My favorite was his reply to a fellow dormitory resident who asked Vance where he was from. "I'm from Arkansas. Now laugh, damn you!"

Clyde V. Kiser

#### NEW ASSOCIATION OF PUBLIC DATA USERS FORMED

The Association of Public Data Users was recently formed in Arlington, Virginia. The purpose of the Association is to inform members of new events related to public data availability, to reduce costs to members in the acquisition and use of public data, and to define and make available services needed by members. The Association plans to maintain a directory of public data files held by each member to facilitate the sharing and exchange of holdings.

Membership in the Association of Public Data Users is open to any organization. For further information contact: Linda Morrison, Acting Secretary, Association of Public Data Users, P.O. Box 9287, Rosslyn Station, Arlington, VA 22209.

**This paper was Rupert Vance's PAA presidential address given in 1952 at the annual meeting at Princeton University.**

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Is Theory for Demographers?

Author(s): Rupert B. Vance

Source: *Social Forces*, Oct., 1952, Vol. 31, No. 1 (Oct., 1952), pp. 9-13

Published by: Oxford University Press

Stable URL: <http://www.jstor.com/stable/2572565>

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periphery expansions and contractions will occur, depending on many variables. Sometimes these changes in the fringe areas follow a certain pattern, as Siegfried has shown for some regions of France. Areas of agrarian unrest naturally expand in times of agricultural depression and contract in times of prosperity. The unrest may disappear entirely for some time, only to revive at the next drought or depression in the very same areas. The same is true of areas of labor unrest in cities. Other changes in the boundaries of political ecological areas may be caused by changes in population; migrants into an area may bring with them political attitudes characteristic of their region of origin.

Changes in the political ecology can thus be due to changes in the social stratification or to changes in the over-all economic and political situation.

It has been suggested by Nilson that, as a rule, those areas which are the typical breeding grounds of extremist or radical movements are also areas of high instability of political attitudes.

There is not sufficient space to discuss in this paper the influence of religious cleavages and of ethnic differences on voting. These and some other factors should be given careful and circumspect consideration. The very essence of political ecology or sociography consists in the avoidance of monocausal explanations. Political attitudes and tendencies are part of the entire personality of an individual, an expression of his view of society,

of his way of life. They can be understood only through an integration of specialized knowledge obtained in the various social sciences.

I believe that the kind of studies which we have been discussing in this paper lend themselves especially well to the practice of integration.

This observation leads to a more general consideration concerning the present situation in sociology with which I want to conclude my remarks. The rising interest in political sociology is more than a fashion or fad. Contrary to a popular opinion which identifies sociology with the practical discipline of social welfare, our science had an eminently political origin. Today it is almost forgotten that Saint Simon, Auguste Comte, and Lorenz Stein conceived the new science of society as an antidote against the poison of social disintegration which, in their opinion, had taken effect since the turn of the eighteenth century, if not much earlier.

We in our generation have made great strides towards an objective, detached approach to social facts. Sometimes it seemed as if over this endeavor we had forgotten the *raison d'être* of our discipline. If in these days we see many of our colleagues turn towards the study of power and authority, of social stratification and social movements and related political phenomena we welcome these endeavors not only as steps towards the recapture of a lost tradition but also as an advance towards the re-integration of the social sciences.

## IS THEORY FOR DEMOGRAPHERS?\*

RUPERT B. VANCE

*University of North Carolina*

Population studies hold high prestige in scientific circles. Each decade multitudes of facts, equivalent in cost to a completely equipped battleship, are gathered at public expense and poured into our waiting calculating machines. Among the social sciences demography has developed some of the most advanced techniques. Our analyses are of the greatest practical use and are eagerly awaited by municipalities, planning

boards, and administrators. Empirically and technically, population has gone a long way. And this is no icy perfection. Population has its human interest angle and its materials are much sought after by publicists.

Demography, on the whole, is doing very well these days. We have facts, we have the techniques and we are neatly polishing up our concepts. But there is one area where demography is getting rather poverty-stricken and frayed at the edges. In the realm of high theory we have been living off our capital and borrowing from our associates.

\* Presidential address read before the annual meeting of the Population Association of America, at Princeton, New Jersey, April 25, 1952.

It seems some time since we have made any investment of our own in basic theory. As demography comes of age it comes to a point of necessity—the necessity of a closer working relationship between its research operations and basic theory. In theory demography remains relatively unstructured. It lacks, shall we say, a binder for its diverse findings. Moreover some findings which have passed for population research among the laity barely reach the level of description. The actual work, it is apparent, was done by the Census Bureau. It is with this in mind that a leading sociologist once told me that the Decennial Census was the worst thing which had happened to sociology in this country. (And, by the way, if the Civil Service becomes set in the policy of certifying only statisticians to the Census Bureau we may become even less devoted to theory.) There is such a thing as an excess diet of raw data. Undigested, it is very bad for the development of the theoretical muscles. I am reminded of a boner from a student who was over-sold on objectivity. Trying to answer the question: Is sociology scientific? he wrote:

The facts gathered are of value and even though they may not prove a point, it must be remembered that the object is to gather the material and not to prove the point.

# I

There exist today striking differences between demography as a field of knowledge and those disciplines with which it is most closely related. These differences are so great that, for good or ill, they are likely to color the future development of our specialty. The development of theoretical systems at a high level of integration is now apparent in fields which touch on population. In economics, in sociology, in social psychology, in the contribution which psychoanalysis and psychiatry are making to the study of human behavior one has the choice of complex thought systems, sophisticated, rationally articulated, and of the highest importance in the tactics and strategy of science. As the validity of these theories is increasingly subjected to test, hypothesis by hypothesis, assumption by assumption, this body of knowledge assumes increasing importance.

In law there is the *Corpus Juris*—the body of the law. In population the nearest we have to a body of theory is several population texts written for the undergraduate student—admittedly not a

high level at which to perform the operations of synthesis and integration demanded for theory. In two texts today I find the implication that it is not the task of the demographer to develop high level theory.

Certainly population is not overrun with the rash of theorists that Colin Clark found when he surveyed the field of economics. Clark wrote that he left the academic world in Britain with dismay at his colleagues' continued preference for the theoretical approach. "There is room," he wrote, "for only two or three economic theorists in each generation, no more. Only men of transcendental powers of reasoning can be candidates for these positions. The rest of us should be economic scientists, content steadily to lay stone on stone in building the structure of ordered knowledge. Instead it seems to be the ambition of nearly every teacher of economics to put his name to a new formulation of economic theory. The result is a vast output of literature of which it is safe to say, scarcely one syllable will be read in fifty years' time."

Among high level theorists we have Malthus to our fathers. He dates from the early Nineteenth Century and falls among the classical English economists for whom Lord Keynes rendered a superb verdict in one sentence: "The characteristics of the special case assumed by the classical theory happen not to be those of the economic society in which we actually live with the result that its teaching is misleading and disastrous if we attempt to apply it to the facts of experience." Undoubtedly in the beginning Malthus intended to analyze the poverty of nations after the fashion of Adam Smith's *Wealth of Nations*. Admittedly the theory now falls far short of explaining poverty in the western world for which it was first written in 1800.

We realize that systematic theory is on the wane. High-level theorists admittedly are lone wolves. In the strategy of science we need one generalissimo of basic theory each generation, whether he is forthcoming or not. Certainly these great theories have not proved cumulative; they are competing and conflicting. After systematic theory what next? The consensus of the future to which we demographers look forward will more likely in Robert Merton's phrase come out of theories of the middle range—"theories intermediate to the minor working hypotheses evolved in abundance during the day by day routines of

research, and the all-inclusive speculations comprising a master conceptual scheme from which it is hoped to derive a very large number of empirically observed uniformities of social behavior." It is no secret to tell you that hopes exist that, when all the hypotheses of the Indianapolis Study are finally fused, population will have a healthy young theory of the middle range.

We can not let this occasion pass without some attention to the development of concepts in social demography. Admittedly fertility, mortality, and migration are not concepts in any true sense; they are simply topics we investigate. Further evidence of theoretical weakness in our field is demography's failure, in President Conant's phrase, to use the tactics and strategy adequate to develop new and significant concepts. When we realize, for example, the revolutionary impact of the concept of culture on social science we are tempted to ask to what recent concepts of value can we point? Frankly we have neglected to do the rigorous work required to either establish or disprove some of our seminal ideas. I can think of two concepts now suspended halfway between heaven and earth, the concept of optimum population and the theory of intervening opportunities in migration. Both of these examples remind us that since the establishment of any hypothesis is extremely difficult, the scientist's first duty is to so frame his hypothesis that it is also capable of disproof. Only in this way can we rid the field, piece by piece, of doubtful lumber which otherwise will remain to clutter it up forever. Neither of these valuable hypotheses, I submit, is capable of disproof as now framed. Intervening opportunities can hardly be defined except as potentially different for each migrant, and no equation with that many unknowns can be solved. Similarly in optimum population many students accept the economic optimum as only one of many optima. This will leave the concept forever stillborn. And in the economic optimum one factor, the standard of living, has approximately all the variables of intervening opportunities. Since it is not capable of disproof, neither can it be proved.

Systematic theory, middle range, concepts and hypotheses, we will not build demography until we learn, like the physical scientists, to repeat and repeat. Our smaller studies, those below the middle range, must be focused more and more on specific hypotheses already set up and embodied in these systematic formulations. Like science

everywhere, demographic analysis must be made cumulative. Once we get a good hypothesis let us repeat and repeat until we determine whether it stands or falls.

In many of our allied fields alternative theories compete for the support of scientists and we are allowed the hope that research by research these theories of the middle range will either approach the closure characteristic of a complete thought system or else be found invalid and discarded. Aye, there is the rub. When a thought system is invalidated and discarded, a dozen reputations may perish with it. Who wants to take that risk?

## II

If there is room in demography for the timid souls, is there also room for the bold and audacious? In science as in poker, we realize we can play it one of two ways. We can play it close to the vest, that is, maximize description and minimize synthesis or we can play it for maximum gains of human knowledge. In other words, as Roger Nett<sup>1</sup> says, the working scientist can be either a tight system builder or a loose system builder. A tight system has high validity and low generality. A line which twists and turns to touch a hundred points in a distribution is worth no more than the hundred points. A line which touches ten points and comes within hailing distance of 90 is usually worth more than the hundred points; it may give the scientist a curve of distribution or an equation of probability for his colleagues to test in a sequence of 100 analyses. "There exists a known tendency for all thought systems to be vulnerable." Accordingly the closer one sticks to his data, the less vulnerable are his generalizations and oftentimes the less important. A loose thought system sacrifices accuracy for the sake of generalization.

In science when one plays for double or nothing, he runs the risk of evolving a system of high generalizations and low validity. Obviously this represents high vulnerability and we are all cautious enough to dread the results. But we should remember there are two forms of maximum error: The first is a system that misses contact with the known facts at every point of observation. The second is no system at all. This is maximum error, for it equates with total ignorance. As a matter of fact,

<sup>1</sup> See Roger Nett, "System Building in Sociology—A Methodological Analysis," in this issue of *Social Forces*, pp. 25-30.

I am willing to make the claim that he who develops a theory capable of being proved invalid makes a contribution. In statistics the disproof of any hypothesis is accepted as a way station on the road to knowledge. Demographers should become brave enough to so state their hypotheses that they are capable of disproof.

Thus far I have been talking about the demographer as a personality, willing or unwilling to take the risks of his profession. As a collectivity, demography should set about organizing its strategy to support shock troops who take calculated risks for theory. In a manuscript which I have been permitted to read in advance of publication, J. J. Spengler demonstrates the extent to which the study of population remains relatively unstructured as to theory and uncircumscribed as to scope. "A variety of scientists," he writes, "have contributed to the development of what currently passes for population theory and their separate contributions have not yet been transfused into an integrated whole."

There is great need for the development of integrated theory of a high order to serve as a "binder" for demography's diverse and particularized findings. Such theory should meet three criteria, says Professor Spengler: (1) It must be dynamic rather than static, (2) it must take account of demographic interrelations as between countries and groups within nations, and (3) it requires a multi-science approach.

I am happy to say I believe the framework for one such theory is now emerging. In concise statement, the transition from high-level deaths and births to the new equilibrium at a low level of vital rates furnishes the population dynamics of the last 300 years in the Western world. The line of succession runs from Dr. Walter Willcox whose studies of world population growth opened up this whole field to Dr. Frank Notestein who has done so much to clinch the analysis. This Demographic Revolution unfolds and diffuses in a manner reminiscent of the Industrial Revolution. Different countries reach different stages of this transition in terms of (1) a time sequence in the West and (2) in terms of culture contacts and time stages as regards non-Western countries. Population status, age, and even sex composition, can then be viewed as stages in this long sequence. Our own low crude death rates and low proportions of natural dependents can be seen as a transitional stage in age distribution which may later level off.

The swarming of Europe is seen as due to the demographic gap which emerged as fertility remained high for 100 years and more after deaths took a sharp decline. Differential fertility emerged in the initial stage of the great decline in birth rates. Outside the West no countries now appear to have the demographic slack which new continents and untapped industrial markets once offered Europe. Demographic movements in succeeding countries, however, are to be judged by economic stages and cultural diffusion as well as the resistance to change within each culture. Such an over-all view can give meaning to the many descriptive population studies now made country by country. If this transition proceeds in orderly sequence it will be the function of demographic studies to classify populations by stage and sequence. But since populations and countries vary, demographers have a choice. They can either explain these variations in the scheme or demolish the basic theory by a critical analysis of succeeding population movements.

It is agreed, I take it, that the function of theory is not to give answers to all the questions which may arise; rather it is to see that in the unfolding of science the "right" questions get asked in the "right" context. Such theories of the middle range in Merton's phrase also serve to set known facts in meaningful context. Demographic fluctuations anywhere can then be tested as short-run movements against the background of this long-run demographic transition. Beginning and ending phases of this great transition, however, will remain unclear: the first because our beginnings run back to inadequate data, the second because closing phases will always remain in the future. An incidental contribution of this scheme is to place the work of Malthus in the perspective of history.

That demography must attend more sharply to its basic theory is indicated in this very field of dynamics. What are long-run and what are short-run phenomena in demography? What is trend and what is a fluctuation? And how long can a fluctuation last before it becomes a trend? Are there reversals in trends?

In fertility analysis it is this problem which caught demographers unprepared. Texts in the hands of our students continued to proclaim decline while the figures showed an amazing upsurge. It is this phenomenon which led Dr. Frank Notestein to the wry comment that to some, demographers

now appear as "double distilled false prophets"—prophets who, proven wrong, persist in staying wrong.

Demography can put controversy in its place only as it develops basic theory. Other disciplines have faced this problem and come up with answers based on theoretical models complex enough to encompass alternatives. Techniques in this field can still be used to test broadly stated theoretical systems. Empirical operations without basic theory, no matter how carefully safeguarded, are now proved dangerous. Finally, it is my feeling that these controversies hasten the development of systematic theory.

Such theory—now in process of being filled in—satisfies two of Professor Spengler's requirements: (1) it is dynamic and (2) it takes account of interrelations between countries and classes. It raises, however, the question of a multi-science approach to theory. Interesting to note, the theory of the demographic transition has been the contribution of population specialists developed largely from the consideration of historic changes in the field of vital rates. It did not come out of the theoretical matrix of either biology, sociology or economics. In certain ways the multi-science orientation of demography has operated to delay the development of population theory. Eclecticism is not conducive to the development of unified theory. Biological explanations of changing vital rates have proved immature and completely inadequate; sociologists have not yet developed an adequate theory of social change; economists have often felt obliged to limit their work to direct economic causation. With a theoretical scheme of its own,

comparable to its techniques, population study has been able to attain a certain unity of attack.

But as we heard Professor W. F. Ogburn argue so eloquently before the Population Association last year, population study must make its further advances by establishing interrelations and correlations as yet unknown. The dynamics of population need to be integrated with some basic theory of social change. There is no escaping the complexity of the problem of interrelation which demography faces. Population study must seek in the dynamics of culture, the economy, and changing society itself the primary conditions of its own dynamics. And then population change itself operates as a starter. As new demographic conditions emerge—mature age composition, new family size, increasing and then decreasing class differentials, lowered rates of natural dependents—social scientists have the task of seeing how such factors initiate change in the society and in the economy. Truly the work of analysis and theory has just begun if we accept the task of tracing major change through nations and classes from Occident to Orient.

But I forget myself. This is but one theory of many, and I am not attempting here to write the prescription for our theory. I do believe, however, that the best spring tonic demographers can take is a good stiff dosage of theory, adequately compounded. There is a level of complexity to which all our scientific disciplines must aspire or resign their task—namely the creation of valid and significant theory. There is, I take it, work for all. Let us then be about our business.

#### GRANTS-IN-AID

Announcement is made by the American Philosophical Society of its grants for expenses to individuals engaged in research in the physical sciences, the biological sciences, the social sciences and the humanities. The Committee on Research meets five times a year, namely, in October, December, February, April, and June. An application may be made at any time and will be considered at the next meeting of the Committee if received a month in advance.

Information concerning grants and application forms may be obtained from the Executive Office of the Society, 104 South Fifth Street, Philadelphia 6, Pa.