

in Three Regions." *Mitigation and Adaptation Strategies for Global Change* 2: 373-404.

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COALE, ANSLEY JOHNSON

(1917-2002)

American demographer Ansley Johnson Coale was educated entirely at Princeton University (where he earned a B.A., M.A., and Ph.D.) and spent his entire academic career at its Office of Population Research, serving as director from 1959 to 1975. He served as president of the Population Association of America from 1967 to 1968 and as president of the International Union for the Scientific Study of Population from 1977 to 1981.

He was remarkably prolific, publishing more than 125 books and articles on a wide variety of demographic topics. He also trained and served as mentor to many students who later became leaders in the field.

His first influential work was *Population Growth and Economic Development in Low-Income Countries* (1958), coauthored with the economist Edgar Hoover. The results, which showed that slowing population growth could enhance economic development, had a major impact on public policy and set the research agenda in this field. This was followed by *Regional Model Life Tables and Stable Populations* (1966), coauthored with Paul Demeny. These model life tables established new empirical regularities and proved invaluable in the development of later techniques for estimating mortality and fertility in populations with inaccurate or incomplete data. Coale, along with demographer William Brass (1921-1999), pioneered the development and use of these techniques, first explicated in the United Nations manual *Methods of Estimating Basic Demographic Measures from Incomplete Data* (Coale and Demeny, 1967), and in *The Demography of Tropical Africa* (1968).

Coale was an accomplished mathematician (he taught radar at the Massachusetts Institute of Technology during World War II), and his *The Growth and Structure of Human Populations* (1972) is an es-

sential textbook in formal demography. The publication of this book was more remarkable in view of the circumstance that the original source materials (notes, hand-drawn figures, tables), carefully collected over the course of many years, were accidentally discarded by a new custodian who did not recognize their significance; everything had to be reconstructed from scratch.

Perhaps Coale's major scientific contribution was to the understanding of the demographic transition. He was the intellectual architect of the European Fertility Project, which examined the historical decline of marital fertility in Europe. Initiated in 1963, the Project eventually resulted in the publication of eight major country monographs and a concluding volume, *The Decline of Fertility in Europe* (1986), edited by Coale and Susan Watkins, summarizing the change in childbearing over a century in 700 provinces in Europe.

See also: *Demographic Transition; Demography, History of; Fertility Transition, Socioeconomic Determinants of; Renewal Theory and the Stable Population Model.*

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COHABITATION

Cohabitation can be defined as a nonmarital coresidential union—that is, the relationship of a couple who live together in the same dwelling but who are not married to each other. Such relationships can also be called informal unions, since, unlike marriages, they are normally not regulated by law, nor is the occurrence of a cohabiting relationship officially registered. Cohabitation seems to be increasing in prevalence all over the Western world. The trend is regarded as an inherent part of the transformation of Western family patterns that has been called the second demographic transition. Less is known about cohabitation than about most other demographic phenomena. Detailed information about it, typically focusing on or limited to women only, comes mainly from surveys.

Levels and Trends

The Scandinavian countries have the highest levels of cohabitation in Europe. At the other extreme are the Southern European countries, together with Ireland. The rest of Europe falls in between. In the mid-1990s 32 percent of Swedish women 20 to 39 years old were cohabiting, and 27 percent of Danish women. In southern Europe less than 10 percent of women in this age group were cohabiting—in Italy, only two percent. Countries in the intermediate category show figures in the range 8 to 18 percent, with France, the Netherlands, Austria, and Switzerland at

the high end, and Belgium, Great Britain, and Germany at the low end. Where cohabitation is well established, the first union is almost always a cohabiting union. (In Sweden, less than five percent of young women start their partnered life by getting married.)

Cohabitation in the United States has been increasing, both within cohorts and over time. By 1995 about a quarter of unmarried women between the ages 25 and 39 were living with an unmarried partner. This would place the United States near the lower end of the intermediate European group. Australia and Canada (with the exception of the province of Quebec, where cohabitation occurs more frequently than in the rest of the country) are similarly positioned, while New Zealand is at the upper end of that group.

Trends over time are difficult to assess. It seems likely that cohabitation started to become common in Sweden in the 1960s, followed by Denmark, and somewhat later by Norway. According to Ron Lesthaeghe, there was a second phase, roughly between 1970 and 1985, when premarital cohabitation spread from the Nordic countries to other parts of the developed world. Children born within cohabiting unions also first became a significant share within all births in the Nordic countries. There, by the 1990s, roughly half of all births were nonmarital. (Among first births in Sweden, two-thirds are nonmarital; 84 percent of those are born to cohabiting parents.) Outside Scandinavia, except for a few countries (France, Austria, and New Zealand), cohabiting unions are typically childless. In both Sweden and Austria, the median age at first birth is lower than the median age at first marriage.

Cohabitation everywhere is most common among young people, primarily those in their twenties, but there is also a noticeable trend in many countries for older women increasingly to choose to cohabit instead of marrying after the dissolution of a marriage (postmarital cohabitation).

Cofactors and Explanations

In contemporary Western countries, many choices that were largely socially prescribed in the past have become options. This creates a new set of risks and a higher degree of uncertainty for individuals. New stages in the life course have emerged, resulting in a “destandardization” of family formation patterns. Cohabitation and living independently without a