

Book Reviews

The Ecological Impact of Population Aging. [Essays in Human Ecology 4]. 1999. Edited by DONALD J. BOGUE. Chicago: Social Development Center. Pp. 83. N.p.g. ISBN: 1-884211-06-02.

This 83-page book attempts to assess ‘*the effect of the elderly upon the man-made environment in which they live*’ [Italics in original]. For example, how does a high concentration of elderly affect overall population health, neighbourhood stability maintenance and renewal, community social and economic institutions, and changeover from predominance of one ethnic group to another? (p. 2). The book’s geographical scope is limited to the metropolitan areas of the United States, its temporal scope to 1990 and 2030. The units of analysis, intermediate between the elderly individual and the national metropolitan population, are a ‘50-percent sample of the 44,458 census tracts, pooled for the entire nation, into which all metropolitan areas of the U.S. are subdivided’ (p. 9). Each census tract averages about 4,200 persons.

The first four chapters of the book deal with the impact of population ageing on neighbourhood change; neighbourhoods of elderly self-care limitations and work disability; elderly poverty and affluence; and home ownership, housing costs, and living arrangements of the elderly. The fifth and final chapter is a projection of neighbourhood ageing to the year 2030 and an evaluation of its impact. Despite the emphasis on neighbourhoods in the titles and texts of these chapters, the correspondence between census tracts and what sociologists would call a neighbourhood is assumed. Throughout, the term ‘ecological’ is used in a social-scientific sense, to refer to inferences based on aggregates (here, census tracts), rather than in a biological sense, to refer to the interactions of individuals and populations with their biotic and abiotic surroundings.

In chapter 5, age structures of each sampled census tract are projected to the year 2030 by applying a United States Census Bureau projection for the whole United States in 2030 to the 1990 age structure of each census tract separately. Twelve predictions are derived. Here are two: ‘*Prediction 1*: The arrival of the elderly boom will stimulate an exhilarating wave of upward mobility, of favorable employment opportunities and rising real wages for anyone of any race, gender or ethnic origin who has a college degree. ... *Prediction 3*: Population ageing will increase neighborhood instability everywhere, but particularly in white middle-class and lower middle-class neighborhoods with unusually high elderly dependency ratios...’ (pp. 79, 81).

Bogue’s overall assessment is optimistic (p. 5): ‘If the predictions of the present study materialize, population ageing may assist the United States to solve some of its most thorny problems of the present. As a result, in 2030 we may have a less unequal distribution of income, fewer slums, less residential segregation on the basis of race-ethnicity and income, less urban sprawl, and a more

efficient metropolitan economy in which neighborhoods (both downtown and suburban) provide comfort-level amenities for a greater share of their residents, both young and old – including the impending explosion in the number of elderly women living alone.’

The title of the book and my own background as an ecologist in the biological sense led me to expect information about another aspect of the ecological impact of population ageing. If average household sizes of the elderly are smaller than those of younger families rearing children, then an increase in the proportion of elderly households will be associated with a reduction in average household size (unless average household sizes of the elderly and the young change, of course). If each household has a refrigerator or other appliances that consume an amount of energy nearly independent of the number of people in the household, then an ageing population could contribute to increased energy consumption per person. On the other hand, if the elderly have reduced mobility and are concentrated in cities, fuel use for commuting could decline and the use of public transport could increase. The ageing of the population could contribute to the concentration of people in the cities and the emptying of rural areas, diminishing the demands of the human population on wetlands, forests, and other largely unpopulated areas. These hypothetical examples show that population ageing could have ecological effects of significance to the biological and earth sciences as well as ecological effects recognizable by the social sciences. The present volume’s meticulous and informative analysis of the human-ecological impacts of population ageing could be followed by a future analysis of the ecological impacts that an ecologist would recognize.

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