

## Preface



The assumptions governing mortality studies in both contemporary and historical demography have recently undergone considerable change. In contemporary demography work was long based on the assumption of relatively mechanical relationships between modernization and mortality decline, and the main disputes concerned the proportionate contribution of different components of modernization etc.: particularly those of economic modernization, working through the agency of rising living standards, *versus* technological/scientific modernization through the agency of curative or preventative medicine. In both cases it was assumed that infectious disease patterns could be considered as essentially passive, dependent, variables, and the main questions to be resolved were the relative importance of known relationships and how these worked themselves out in given instances.

Recently, however, a more complex picture has emerged. The extent of slow-downs in Third-World mortality decline generally has been much debated but in certain regions, particularly in Africa, political and military disruption has damaged basic health infrastructures and threatened to reverse the trend. At the same time, infectious disease patterns themselves have proved to be less passive than previously thought. The appearance of drug resistant strains of malaria provided an early, ominous, instance of this, but a more dramatic development has been the rise of 'new diseases', especially AIDS. Such developments, in turn, raise more basic issues about the nature of modernization itself and its relationship to mortality decline. Urbanization, improved transport, and the growth of long-range economic linkages have evidently provided new opportunities for infectious micro-organisms to thrive, whilst recent events have posed questions concerning ethnicity, political modernization and the post-colonial state in both the northern and southern hemispheres.

At the same time the conceptual underpinnings of historical mortality studies have undergone substantial revision. Here too, the classical approach saw mortality as a dependent variable responding to changes in living standards; a view both reinforced and narrowed in its focus by McKeown's nutritional determinism. Despite the latter's wide influence, however, empirical evidence for a strong nutritional role in secular mortality change before the late nineteenth century has been scarce whilst a number of studies have yielded results hard to reconcile with the hypothesis (Kunitz and Engerman this volume). Such findings fostered the view that, historically, secular mortality had responded mainly to climatic or biological factors lying outside the realm of economy and society and led in turn to a relative marginalization of mortality in historical studies since, throughout the 1980s, historical demographers sought to build closer links with their colleagues in cognate areas of social and economic history.

The conceptualization of mortality change as 'autonomous' created considerable heuristic problems, past climatic and, above all, micro-biological changes being recalcitrant to historical observation, but it also imposed a radical discontinuity on mortality studies generally as between past and contemporary populations. Among the latter, mortality was clearly related to the state of economy and society, as well as to medical developments, whereas in the former it appeared to be an entirely independent variable. There thus seemed little common ground between the two domains which were apparently unable to address each other's concerns.

Recent work with historical populations has attempted to overcome these problems by shifting attention from mortality, considered as a single output variable, to the dynamics of infectious disease

processes as such. Central to these studies in 'historical epidemiology' is an analysis of the way in which spatial structure: embracing such phenomena as population density, migration flows and economic linkages as well as the characteristics of the environment itself, affect levels of exposure to infectious agents. The British Society for Population Studies' 1991 Conference, *Historical Epidemiology and the Health Transition*, assembled demographers and related professionals working with both historical and contemporary populations in order to develop a common framework for understanding the dynamics of infectious disease mortality in both these contexts.

The resulting papers, a selection of which form the present volume, demonstrate the importance of exposure to infection as a determinant of mortality variations in both time and space. Historically, it seems clear that the popularity of the 'autonomous mortality' concept reflects an excessive concentration on factors affecting resistance to infection and on the wage/price ratio as a proxy for the world of human affairs in its totality. It is evident that levels of exposure to infection responded to a much wider range of factors, not least of which, and implicated repeatedly in the papers read to the conference, was the large-scale organization of space by state structures and global economic systems: neither in historical Europe nor the contemporary Third World can the dynamics of exposure to infection be understood without reference to the progressive incorporation of populations within systems of this kind.

A second, and less expected, theme to recur was the relationship between power and what can be termed 'situational knowledge' of a given milieu, its disease hazards and the mechanisms of disease transmission operating within it. Such knowledge, obtainable by means including both empirical experience and the application of abstract conceptual frameworks, such as germ theory, to given instances, enables exposure to infection to be reduced by avoiding hazardous environments and activities. Often, however, individuals were unable to act on such knowledge, being constrained to move to less healthy environments, against what Dobson (this volume) aptly terms the 'contours of death', as a result of economic powerlessness, as with migrants to the cities of early-modern Europe, or, as in the mines of tropical Africa (Fetter, this volume) direct politico-military coercion.

Where contemporary health problems, such as malaria and HIV are concerned, the issue emerges again in a different form: the need to transform health professionals' general conceptual knowledge of disease transmission into lay knowledge of the consequences of specific actions in specific situations. At one level this raises the kind of technical questions considered by Bradley (this volume) in his discussion of malaria: how are disease risks encountered in the course of specific daily activities in specific environments and how can they be reduced? But at another it raises issues of cultural translation akin to those involved between the statements 'smoking increases the risk of lung cancer' and 'if I smoke I am likely to die of cancer'.

The issue of power relations recurs at both these levels. Unlike the older 'top down' style of technology-intensive program, the formation of situational knowledge requires the active participation and collaboration of the populations concerned, and thus that they be capable of making their voices heard by health professionals. Beyond this, however, success is unlikely where professionals of any and all kinds are identified with a hostile official culture and an unresponsive, or repressive, state apparatus. As in Europe, so in the Third World, the struggle for public health raises questions going to the heart of the relationship between state and society.

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