

## City life

*Human Settlements: The Environmental Challenge.* (A Compendium of United Nations Papers Prepared for the Stockholm Conference on the Human Environment, 1972.) Pp. xvi+209. (Macmillan: London and Basingstoke, March 1974.) £5.95.

*Man, Materials, and Environment.* National Academy of Sciences: National Academy of Engineering. Pp. xviii+236. (MIT: Cambridge, Massachusetts and London, 1973.) \$3.95.

*Topophilia: A Study of Environmental Perception, Attitudes and Values.* By Yi-Fu Tuan. Pp. x+260. (Prentice-Hall: Englewood Cliffs, New Jersey, January 1974.) \$8.95 cloth; \$4.95 paper.

THE United Nations Conference on the Human Environment held in Stockholm 1972 may well prove one of the most significant events of the decade. Consequently a volume of collected papers from the conference is likely to form a valuable reference to any research group working in this area. One feature of economic growth has been the enormously rapid development of cities, particularly in developing countries, and the fifteen background papers prepared on this issue around the theme "The Planning and Management of Human Settlements for Environmental Quality" are brought together in this work. The papers are not intended to be original. What they attempt to provide is a thorough and coordinated review and analysis of current problems in each subject area. Included are general commentaries on comprehensive development planning, population growth and distribution, rural development, a case study on the environmental impact of Polish industry on Warsaw central city, transport and communication, waste disposal and sewage and lastly, a relatively short account of social, cultural and aesthetic factors. An appendix lists those recommendations of the conference concerned with settlement and urbanisation.

The main purpose of *Human Settlements* is to demonstrate the importance of the careful planning and management of human settlements and that this should be recognised as a major means of assuring an appropriate environment for human survival and development. The book emphasises the point that pollution need be by no means an unavoidable consequence of economic development. The suggestions made in the various chapters (written by different authors although not individually named here) are wide ranging but suffer in that they tend to be over-generalised and lack a certain coherence of view; possibly inevitable in a set of collected papers. Nevertheless the work contains much of

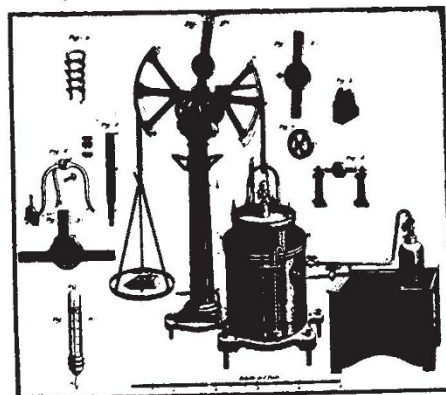
interest to those who would argue that it is in towns and cities, where most people spend the bulk of their lives, that the environment matters most. Two factors mitigate against wholeheartedly recommending it as a purchase for the individual researcher; the first is that two years have elapsed since the conference in June 1972; the second is an exceedingly high price for what, after all, is a summary.

By comparison, *Man, Materials and Environment*, a report on materials policy in the United States in relation to environment, has been produced with laudible rapidity. Using the formula of direct replication of authors' typescript has kept the cost down to a reasonable level and resulted in a book sturdy enough to withstand its presumably limited life (in this rapidly developing research area). The book represents the findings of a number of authoritative study groups contracted by the National Academy of Sciences, one of whose roles was to evaluate the effects on US materials policy of the suggestions of the Stockholm Conference. The aim of the study groups was to identify major issues and propose some positive actions with respect to public policy and research. The detailed findings of the teams are conveniently summarised in the first chapter. The second chapter, on the economic implications of seeking a high environmental quality, sets out the arguments for and against reduction in the overall rate of economic growth. The problems of metallic and non-metallic mineral extraction, fuels and forest products and the relations of domestic policy for international trade are tackled in turn and included for good measure is a comparative case study of environmental resource problems and policies in Japan. Particular attention is paid to the operation of the 'polluter pays' principle in a mixed economy and this method is advocated for the United States (and has now also been accepted by the European Commission for inclusion into the Community Environment Protection Programme). Emission taxes rather than subsidies are reckoned to be the socially least expensive but in a number of areas, such as packaging, the suggestion is that experimentation will lead to the best allocation of charges. In the main, this volume is entirely constructive, suggesting lines of research and policy methods to safeguard the future of the natural environment. One may jibe at some of the emphases but in doing so must accept that the research proposed will help to clarify these areas of uncertainty. A book certainly to be recommended to any serious researcher in this field.

Finally, Tuan's book *Topophilia*, easily compensates for the absence of

discussion about cultural aspects of the environment found in the other volumes. Topophilia is the affective bond between people and place. In this enjoyable and stimulating book Tuan sets himself the task of describing a complicated synthesis and he has succeeded admirably. The book has Tuan's distinctive style and communicates well both his subject and his own love of it. He approaches the questions: What are our views on the physical environment, natural and man made? How do we perceive, structure and evaluate it? What have been and what are our environmental ideals? How do economy, life style, and the physical setting affect environmental attitudes and values? What are the links between environment and world views? He traces and compares the answers to these questions from the early Greeks to the modern American city, the Aivilik Eskimo and the Hopi Indian, between humans and animals. By contrasting the perceptions and activities of man, the city dweller with that of his forbears, Tuan exposes both the richness and the poverty of city life. He builds an image of 'civilised' man's perception of nature, especially the 'countryside', as a reaction to the city which itself was originally evolved as an escape from the dangers of the wilderness. Thus, Tuan describes the city as a symbol, even tracing the history and function of city nicknames. For example, of the four American cities with the largest number of nicknames, New York (the Big Apple, the Babylonian Bedlam) boasts its world status, Washington its political supremacy, Chicago projects civility and San Francisco elegance. Of a different

## Dispensing gases



Lavoisier's gasometer, taken from his *Traité élémentaire de Chimie*. The gasometer supplied a stream of gas flowing at a steady rate to a reaction chamber and was used in the demonstration of the quantitative composition of water; it was introduced to Holland by Martinus Van Marum. From *Martinus Van Marum: Life and Work*; vol. 4, Van Marum's Scientific Instruments in Teyler's Museum. By G. L'E. Turner and T. H. Leveres (Noordhoff: Leyden, 1973. Dfl. 60).