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to Ireland in the 25 years since leaving. At the same time, Western's words made me consider the claims and rights of Israelis and Palestinians to home, to place, to land, and their relationships to one another, and to contemplate the plight of refugees and migrants everywhere and through time. It is a book far more relevant and important than John Western probably ever contemplated as he set to work.

A Passage to England conveys an image of hard-working people in a strange yet familiar land and their struggles to succeed in the face of adversity. It conveys images of landscape and society, of past and present, of people and place. It is beautifully conceived and written with extraordinary perceptiveness and sensitivity. Far beyond its stated aims, this book contributes to a better understanding of cultural differences among peoples and the frustrations and frictions often experienced as a consequence. It is, in the words of John Western describing his 'people', "an astounding affirmation of the human spirit".

> Stanley Waterman University of Haifa

RURAL PROCESS-PATTERN RELATIONSHIPS: NOMADIZATION, SEDEN-TARIZATION AND SETTLEMENT FIXATION by David Grossman. New York: Praeger, 1992.

Scholars and students of rural studies interested in a sensible theory and case studies of the creation and evolution of patterns of rural settlements will greatly appreciate David Grossman's book. This highly condensed review will hopefully do it full justice.

Each of the eleven chapters of the book is a closely argued account based on the author's work in the developed and less developed world. Grossman's wide experience and long-standing interest in development and change in rural areas, enables him to bring examples from Nigeria, the British Isles and mostly from Eretz Israel (Palestine). Grossman's work is clearly written and profoundly thoughtful in its analysis of the major processes underlying nomadization, sedentarization and settlement fixation, especially in England and Eretz Israel. The strength of the book lies in its adoption of a historical perspective along with its emphasis on the mode of economic operation and the attitudes to development of both the specific society and the ruling authorities at a given historical time.

The book may be divided into three parts. The first chapter of the first part presents the focus of Grossman's conceptual and theoretical approach. It begins with definitions and clarifications concerning rurality and rural settlements. This is followed by a discussion of various models and theoretical approaches to the interpretation of rural spatial processes. Processes and patterns differ according to the mode of economic operation, be it subsistence or purely commercial. I fully agree with Grossman that it is difficult and probably impossible to develop a general model for the evolution of settlements under subsistence economies on the basis of concrete evidence. Some of the proposed processes, for example, are not applicable to the smaller states and especially to the island states of the developing world. In these fragile eco-systems, where the land's carrying capacity and resources are limited, there is a significant number of cases where rural settlements and patterns of economic activity have been largely preserved. They have been preserved in size and mode of operation, and any increase in population is being spread outward so as not to disintegrate the delicate human and environmental balance. Altogether, Grossman succeeds in offering the reader a wide range of reasons for the differing patterns of rural settlements. The use of diagrams, however, would help clarify some of the models and theoretical relationships for the less knowledgeable reader.

The second part of the book, containing chapters two and three, focuses on the British Isles. The historical data available for different periods enables the author to trace the British colonization process to its Anglo-Saxon roots. These data demonstrate the relationships between demographic processes and settlement processes, and are accompanied by a discussion of the different processes underlying dispersion and nucleation. The analysis is widened to central issues related to the impact of the farming systems, the production mode (particularly under feudalism), and colonization processes.

The third part of the book, containing seven chapters, is the core of the study and is largely based on the author's extensive field work. It deals with patterns of processes among three different groups in Eretz Israel/Palestine: the Arab peasants (fellahin), the nomadic population (Bedouin), and the Jewish settlers, all of which have occurred within a small territory of no more than 26,000 square kilometres. Here too the availability of historical data allows Grossman to trace changes and describe settlement processes and process patterns in detail.

Grossman's discussion starts with the earliest known records, but the main focus is on the past two centuries. First, the pattern formation in ancient and medieval times is reviewed. The settlement pattern during these periods was unstable and influenced by changing political conditions, which frequently interrupted the ongoing, smooth evolution of any given settlement system. This is followed by a discussion of the reasons for the evolution and persistence of nucleation of Arab settlements during the Ottoman period. Nomadization and the underlying reasons for the sedentarization processes, especially among the Bedouins, are analyzed. Thus settlement fixation, population mobility and expansion into frontier areas are extensively and thoroughly discussed. The term 'carrying capacity' explicitly appears in the discussion of farmer and herdsman strategies on the desert margins. This concept is implicitly referred to whenever the availability of environmental resources to the farming population is discussed. However, a more intensive and explicit discussion of the carrying capacity of the land, when relations between a population and its environmental resources are addressed, could shed more light on the economic decisions of individuals and

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communities. This section ends with a discussion of the emergence of Jewish settlements, the underlying forces of their establishment, the different settlement types, their geographical distribution, and their crucial impact on the map of the settlement patterns of Eretz Israel.

In contrast to many other books concerned mainly with rural settlements, this book is about people. Grossman makes it clear that people had a significant influence on sedentarization processes and the pattern of rural settlements. The impact of terrain and resource availability on settlement patterns is also well emphasized. The decision-making of individuals and groups, tenurial laws and customs, the role and inter-relationships of classes, and the role of the lord, the state or any other ruling authority, all had their impact at any given time.

This is certainly a thought-provoking book and it has taught me a great deal. I highly recommend it to readers with interest in the development patterns of rural settlement and in processes of rural transformation.

Michael Sofer Tel-Aviv University

SPATIAL DATA ANALYSIS IN THE SOCIAL AND ENVIRONMENTAL SCIENCES by Robert Haining. Cambridge: Cambridge University Press, 1990.

This is a graduate text in quantitative geography, maybe the first of its kind since L. King's 1969 book. It is in line with recent work in statistics, notably Ripley's *Spatial Statistics* (1981). The book begins with an extensive discussion on the nature of spatial data and the problems associated with their analysis. The first two chapters are then followed by discussions of exploratory, robust and explanatory analyses of geographical data. Of these, the orderly presentation of robust avenues is novel. In most parts of the book, the discussion focuses on the regression model in its various modes. Haining highlights many of the problems involved in its applications, and in the formulation and interpretation of the dependent variable (such as autocorrelation). Special attention is given to non-parametric modes of analysis.

The book's level of complexity in not uniform in the various discussions, as well as in the detailed examples. The depth of analysis in this book demonstrates the need for an equivalent text that would handle other elements of statistical analysis, mainly descriptive statistics, probability theory (for both continuous and discrete distributions) and analysis of variance.

The book ends almost abruptly, with a postscript rather than a strong summary chapter. One may only join the author in lamenting the lack of packages of computer programs for the statistical analysis of spatial data.

This book is an important addition to the literature in geographical analysis, and it will certainly well serve a growing community of advanced students and