iliary method for the performance of other assignments. Nevertheless, these minor drawbacks do not detract from the high quality of this textbook as a superb guide to students and researchers alike.

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## RURAL ARAB DEMOGRAPHY AND EARLY JEWISH SETTLEMENT IN PALESTINE: DISTRIBUTION AND POPULATION DENSITY DURING THE LATE OTTOMAN AND EARLY MANDATE PERIODS, by David Grossman. New Brunswick, NJ: Transaction Publishers, 2010.

This book tackles an important issue in recent studies of the Land of Israel—its demographic state on the eve of modern Jewish settlement in Palestine in the late 1880s and changes caused by this process and other factors. In the background of this question stands the policy of the British Mandate regarding Jewish immigration and settlement in Palestine during the 1930s and 1940s. This issue has generated a heated public discussion in recent decades, which is reviewed by Grossman in detail, before turning to his own analysis. He adopts a bottom-top approach, whereby results of a multitude of local analyses are integrated into a comprehensive scene. Using novel methods from human geography, demography and economics this analysis relies on close to 400 sources spanning over 150 years.

The book has 7 chapters. The first two provide the necessary background. Chapter 1 describes the economic, social, political and ecological conditions of the Arab settlement system in Palestine in the second half of the 19<sup>th</sup> century. It deals primarily with the condition of this rural agrarian farming system and its exposure to the economic growth and capitalism of the West. It thus puts under question the common view that Zionist settlers are responsible for the introduction of these processes.

The second chapter portrays the migration to and settlement of various ethnic groups in Palestine during the 19<sup>th</sup> century. Grossman puts together the puzzle based on old and new sources. The major insight gained is that, contrary to accepted wisdom, Arab migration began before the mid-19<sup>th</sup> century and accelerated in its second half. This acceleration originated to a major degree in Ottoman development policy of the empire, including the Land Law of 1858, which predated the establishment of the first Jewish colonies during the 1880s. The latter had an impact only in accelerating Arab migration but shared this impact with other factors. Grossman's conclusion is that due to this process Jewish colonies were therefore allocated by the Ottomans with only spatially and economically marginal lands.

The next chapters comprise the main analytical effort of the book, aimed at examining the issue of whether on not Palestine was already populated prior to the 1<sup>st</sup> Aliya (first wave of Jewish immigrants in the 1880s). The author questions first the use of Western sources, approaches and methodologies which provided the basis for the prevailing view that the country was empty at that time. Chapter 3 analyses the population distribution and density of the various districts during the 19<sup>th</sup> century as reflected in these studies. The next chapter assesses the possible data sources available for an alternative portrayal of the demographic picture in the second half of the 19<sup>th</sup> century to confirm its reliability, particularly the Ottoman 1871/2 census of the Syrian District.

This is the basis for chapter 5, which is the central one of this book, analyzing population distribution in the various sub-districts of Palestine in the last three decades of the 19<sup>th</sup> Century. Grossman finds that the image of an empty land is a far cry from reality, as many regions were already quite populated by Arabs. The latter were ready to sell land to Jews only in marginal locations, leading him to conclude that supply of land by the Arabs, rather then demand by Jews was in fact the major force shaping early Jewish settlement.

Chapter 6 uses this information and insight to tackle the acute question during the British Mandate regarding changes in population pressure and their impact on carrying capacity in Palestine, and particularly on the Arab fellaheen population. The author provides first a thorough review of the debate and methods of understanding and evaluating carrying capacity. He then develops his own method for measuring the amount of arable land per capita needed for attaining minimal decent survival at the sub-district level, and how this value changed due to population dynamics. His analysis leads him to reject British Mandate official allegations that Jewish settlement was responsible for generating land pressures and declining land parcel size available for Arab fellaheen. Viewing them as sweeping generalizations that may be true for only marginal areas, Grossman suggests an alternative explanation—that this was caused by the high natural increase rate of the Arabs, regardless of land acquisitions by Jews.

The final chapter of the book is based on these two profound insights. The major conclusion is that while there were considerable inter-regional variations in population densities, the Land of Israel/Palestine was never empty during the 19<sup>th</sup> century. In fact, the correlation between the regions of Jewish root striking and the regions of low Arab population density, often unstable from a settlement point of view, is in fact responsible for the well-known N shape of the Jewish settlement pattern in the Land of Israel/Palestine.

The concluding remarks of the book refer to its lessons for both the Jewish and Arab societies of contemporary Israel. Grossman argues that the guiding Jewish policy principle of compact settlement in low population density regions during the pre-State period was in fact responsible for its success and continuity. This successful geopolitical spatial strategy, however, was not adopted by West Bank and Gaza Strip Jewish settlers after 1967, who have been preferring to rather settle in the heart of high density Arab populated areas. He therefore advises them to conduct a thorough re-evaluation of their spatial strategy and its serious geopolitical implications. The Israeli Arab Palestinians, for their part, are also faced with a significant challenge for alleviating their present day economic and political stringencies. They, too, are advised to adopt the necessary lessons from 19<sup>th</sup> century Palestine, in terms of the impact of high natural increase rates on population density and availability of farming land and other subsistence resources.

The detailed settlement and demographic analysis offered in this book is indeed thorough and rigorous. It is conducted in the most objective and balanced manners possible, using updated methods for evaluating data and sources. It is for these reasons that the picture portrayed looks very reliable and persuasive, especially given the abundant previous efforts to provide answers to similar questions. Indeed the meandering truth powerfully surfaces here. Yet it is precisely this process that brings to the fore the question of whether we have reached the final terminal in terms of identifying, surfacing and analyzing sources of data, as well as appropriate methods. This very book itself, in addition to the history and politics of science (and those of the real world,) suggest that the truth has not stopped meandering.

It is for this reason that some reflection on the processes explored and the lessons suggested by Grossman are in order. First, there is no escape from viewing these processes in a wide spatial-historical perspective. The settlement of the Jewish population and its mutual relationship with the Arab settlement cannot be viewed as a discrete process. The book in fact outlines a succession of immigration and settlement waves from different origins throughout the 19<sup>th</sup> century, in which that of the Jewish population toward the its end constitutes but one wave. From this historical perspective, and from that of a spatial perspective of the Land of Israel proper, contemporary Jewish migration and settlement were not canonical events capable of shaping time and space to significant degrees. At the time, they were such only from the purely Zionist perspectives of the Land of Israel.

Second, Grossman regards the high natural increase rate of present day Israeli Arab-Palestinians as a major factor responsible for their economic-agrarian distress. He parallels this process to similar ones in the 19<sup>th</sup> century, when their land reserves diminished due to bequest and extensive parceling to inheritors. The major issue that comes to mind here is whether such parallelism is circumstantially in place. While Ottoman agrarian public policy did not discriminate against Arabs in the 19<sup>th</sup> century, this is not the case in Israel today. It is thus possible to reverse Grossman's hypothesis; that is, Israeli Arab-Palestinian high (though declining) natural increase rate is a product of diminishing agrarian resources lost due to State policy. The lost agrarian resources are compensated for by social-demographic capital in order to achieve sustainable subsistence and personal and collective security. In other words, under present circumstances Grossman's dependent agrarian variable may in fact become the independent variable, while his independent demographic variable becomes the dependent one. If the revised hypothesis is realistic, and holding constant the impacts of the Israeli-Palestinian conflict and sense of collective fear by the Israeli Arab-Palestinians as an ethnic minority, adoption of this insight can prove a powerful public policy tool by Israeli government regarding their high natural increase rate. Such policy would wisely allocate proper agrarian resources to this population, particularly to the Negev Bedouin, among whom this equation is very acute. This policy might very faithfully serve Zionist economic and geopolitical strategic interests.

These reflections do not impair the value of this book whatsoever. Clearly, the readers are presented with a very important book portraying an interesting and challenging reality from various perspectives which confronts prevailing truths, shedding them with new light, and offering new and serious insights and conclusions. It thus provides an avenue for new scientific and public discussion. This is indeed what one would expect from a scholarly book that has social and political implications.

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## URBAN RHYTHMS AND TRAVEL BEHAVIOUR – SPATIAL AND TEMPORAL PHENOMENA OF DAILY TRAVEL, By Stefan Schonfelder and Kay W. Axhausen. Surrey, UK: Ashgate, 2010.

Time-space geography has been studied for quite a while in our discipline. Recent availability of longitudinal data on individual trip making and GPS observations have provided the authors of Urban Rhythms and Travel Behaviour new insights and ability to describe and model the variability of individual travel patterns. This book illustrates the contribution of the time-space geographic approach to the study of travel behavior. It provides both a theoretical approach to long-term decision making in time and space and an explorative analysis of recently collected data sets, revealing the structures and behavioral mechanisms involved. In the area of transport studies, this approach is known and practiced under the title of activity-based analysis. Although patterns and rhythms of urban life have fascinated observers ever since urban life began, this study employs, for the first time, multiday geocoded observations to address questions raised earlier in the fields of both geography and transportation, but never pursued for lack of data. The book tries to answer the following questions: What are the multiday rhythms of activity participation? How variable is behavior from day to day? What is the size and shape of human activity space in the urban area? How is innovation in spatial choice mixed with well-known routines? By answering these questions, the book illuminates how planning should translate the answers into forecasting tools and transport strategies.

The book contains four parts, including altogether 12 chapters, dealing with: 1 Foundations; 2. Temporal aspects of daily travel behavior; 3. Human spatial behav-