The Female Population of France in the 19th Century

A Reconstruction of 82 Départements
THE FEMALE POPULATION
OF FRANCE
IN THE NINETEENTH CENTURY
This book is published in conjunction with a series on the decline of European fertility.
Foreword

This book presents the statistical base for an analysis of the decline of fertility in France. In a sense, it is a by-product—albeit an important one—of the overall European Fertility Project that is being conducted under the auspices of the Office of Population Research at Princeton University. Originated in 1964 and funded by the Rockefeller Foundation, the National Science Foundation, and the National Institutes of Health, the Project seeks to uncover greater understanding of the circumstances under which a major fertility decline occurs through a detailed examination of fertility trends in 700 European provinces over the last century.

France paved the way for the decline of fertility in Europe. Thus, it was necessary to go back much further in time to obtain demographic data than was the case for the other countries included in the Project. In examining the early French data, Dr. Etienne van de Walle concluded that they were inadequate for the kind of analysis required by the overall Project. This led to his decision to construct estimates of the female population of France, by département, throughout the 19th century. It is believed that the results will be of interest to historians, social scientists, and demographers outside the context of the European Fertility Project; for this reason, they are being presented as a separate entity in this volume.

With publication of this book, demographers now have available the estimated female population of 19th-century France by age and marital status, adjusted estimates of births, and estimates of various demographic indices such as marital and illegitimate fertility, age at marriage, and expectation of life at birth. The material is presented in two parts. In Part One, Dr. van de Walle describes the methods used in his reconstruction, and illustrates the results through comparisons between reported and estimated figures. Part Two presents demographic data by département as well as a brief exposition for the French reader.

Dr. van de Walle describes trends revealed by the data in the last two chapters of Part One. A more detailed examination of the
actual fertility decline as well as the effects, if any, of various social, cultural, and economic factors on the birth rate in France will be presented in the book he is currently writing as his contribution to the European Fertility Project.

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Preface

This study originated in the need for usable estimates of fertility—in particular marital fertility—for the départements of France, as part of a larger project tracing the decline in fertility by region in Europe. In its first stage, the overall project aims at computing standardized indices of fertility and nuptiality for each province-sized administrative area in Europe, at census dates when the population was enumerated by age and marital status and the vital registration recorded the number of births. The second stage will consist of the analysis of this information and a search for explanations—or at least correlates—of the fertility decline in Europe during the 19th century. In France, the units of observation are départements, administrative creations of the French Revolution which remain almost constant throughout the 19th century, and for which demographic information is tabulated in detail. The present book is devoted to the first stage of the study, i.e. to the computation by département of the basic indices that will later be used to analyze the determinants of the long-term drop in fertility. The fact that our unit of observation is the département imposes special constraints. The available data are official censuses and vital statistics. This imposes a terminus a quo to the study: the creation of the French vital statistics and the publication of yearly data by départements starting in 1800, and the first published French census, i.e. the 1801 enumeration. At the other end of the range, the 1901 and 1906 censuses give a more artificial terminus ad quem. It could be argued that 1914 constituted the end of an historical period, and that the last census to be taken before the war, in 1911, should have delimited our study. But in French population statistics, 1901 marked a new era in census-taking as well as a new century. In 1901, for the first time, all census returns had to be sent to Paris, where the processing of the data was centralized and standardized (Dupâquier, 1965, p. 37). Improved techniques of tallying, including the use of adding machines in 1901 and of

¹ The project is described in Coale, 1969. (Full bibliographical references are given at the end of the book.)
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Hollerith machines in 1906, were probably responsible for the marked improvement of quality of the published results. Similarly, a reform of vital registration in 1907 introduced the use of individual bulletins for each event, and centralized the processing in Paris, so that the local registrars were freed from the statistical functions they had assumed since the Revolution (Huber, 1938, Vol. II, p. 69).

This study will be limited to a reconstruction of the female population of France. The genesis of this project—the interest in fertility, best considered from the female angle—as well as the fact that the female population is less disturbed by migration and less exposed to exceptional mortality in times of war, and therefore can be reconstructed more easily, suggested this choice. The methods developed here, however, could be adapted to the men with a few changes. The types of biases encountered in the study of women are also present in the other sex's statistics. For technical reasons—the disruptive impact of massive migration in four urban départements—we have also limited the study to 82 départements.

The aim of the present book is to fill the gaps in our knowledge about the female age and marital status distribution of France in the 19th century in order to allow the computation of indices of total, marital, and illegitimate fertility as well as indices of nuptiality. A secondary aim is to evaluate the quality and completeness of those parts of the record for which detailed published statistics exist. As will be shown, there are persistent and grave errors in the censuses, even during the second half of the century. New age and marital status distributions are presented here to replace those given in the official documents, and to supplement the official statistics before 1851. There are also biases of various sorts in the vital registration, and new estimates of the number of births are offered, starting at the beginning of the century.

The first chapter of this book will provide some background for the study of the decline of fertility in France. We shall devote the second chapter to a description of the existing data. Chapter 3 discusses our methods of reconstructing the female population by age; Chapter 4 will deal with the methods of reconstructing marital
status. Chapter 5 presents the results for the whole of France, and Chapter 6 examines some of the patterns of bias found in the French statistics by département. The main results are summarized in the two last chapters. In Chapter 7, we examine the general trends in fertility and nuptiality. Chapter 8 presents some by-products of this study, namely estimates of mortality (expectation of life at birth) and of migration for the départements. Finally, in a separate section we present the detailed results of the study for each département, preceded by a note that explains the methods used in the reconstruction and draws attention to some of the more common defects of the data.

As we hope that French regional historians will be among the users of this book, since it presents data by départements and the means to evaluate the quality of the local statistics during the 19th century, we have included a French summary at the end.

Discussion and interpretation of the findings will not be very detailed in this book, which represents only the first part of a larger study of the French fertility decline. A second book will deal with the correlates of fertility and will discuss the causes of the decline. It will use the data that have been reconstructed here, in combination with other sets of statistical material. The limitations of time, space, and subject matter which restrict the scope of the present book will then be abandoned.

I wish to acknowledge here my intellectual indebtedness to Professor Ansley J. Coale, who has devised many of the methods of population reconstruction used in this book and has advised me on their application to the case of France. He has been constantly associated with this research, and deserves far more credit than I can give in a small paragraph. I must also recognize the invaluable help of the two persons who have assumed the tedious and repetitive care of individual estimations and corrections for each of the départements—Elise F. Jones for the reconstruction of the population, and Francine van de Walle for the reconstruction by marital status. Patricia Taylor edited the tables and figures and managed the final assembly of the manuscript. I thank all those who have contributed useful advice or information, or read critically the
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whole or part of the manuscript; among them André Armengaud, Dr. Jean-Noël Biraben, Jacques Dupâquier, Léon H. Dupriez, Etienne Hélin, Louis Henry, and Guillaume Wunsch. And last but not least, I must acknowledge the good humor and patience of Hazel Chafey, who typed an arid text in successive versions. I thank the National Institutes of Health, whose generous support has made this project possible.

A NOTE ON TERMINOLOGY

In this book I have used systematically the term “reconstruction” to describe the process of simulating populations from aggregate vital registration data, as opposed to “reconstitution,” which attempts to reassemble families from individual, usually nominal, information drawn from a variety of sources (census lists, registers of baptism, marriage and burial, etc.), or to retrace the life history of individuals. In this sense, the studies of Crulai (Gautier and Henry, 1958) and of the British peerage (Hollingsworth, 1964) are based on reconstitution; Bourgeois-Pichat reconstructed the population of France (1951). The present work is a reconstruction. The choice of terms is somewhat arbitrary and not widely accepted. Bourgeois-Pichat himself talks about reconstitution (p. 638). I receive some support from Webster’s Third International Dictionary: to reconstitute is “to build up again by putting back together the original parts or elements”; while reconstruction is described as:

2. something reconstructed: as a: a model or replica of something b: something reassembled (as from parts) into its original form or appearance.

The noun “département” and the adjective “départemental” are used throughout in their French spelling, without italics.

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