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978-1-107-02327-7 - Reassessing Paleolithic Subsistence: The Neandertal and Modern Human

Foragers of Saint-Césaire

Eugène Morin

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REASSESSING PALEOLITHIC SUBSISTENCE

The contribution of Neandertals to the biological and cultural emergence of early modern humans remains highly debated in anthropology. Particularly controversial is the long-held view that Neandertals in western Europe were replaced 30,000 to 40,000 years ago by early modern humans expanding out of Africa. This book contributes to this debate by exploring the diets and foraging patterns of both Neandertals and early modern humans. Eugène Morin examines the faunal remains from Saint-Césaire in France, which contain an exceptionally long and detailed chronological sequence, as well as genetic, anatomical, and archaeological evidence, to shed new light on the problem of modern human origins.

Eugène Morin is an Assistant Professor in the Department of Anthropology at Trent University in Canada. He has published articles in *Journal of Archaeological Science*, *Geoarchaeology*, and *PNAS* and serves on the editorial board of *Ethnobiology Letters*.

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*The Neandertal and Modern Human
Foragers of Saint-Césaire*

EUGÈNE MORIN

Trent University, Canada



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A Laure, Lucas, Charles, et Louis

pour leur amour, leur patience, et leur soutien

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PROLOGUE

In 1999, I met with François Lévêque, then the Conservateur en Chef Honoraire du Patrimoine for the Poitou-Charentes area, in Poitiers, France, to discuss the possibility of studying Paleolithic materials from Saint-Césaire. Located in western France, this rockshelter has been the focus of relentless attention since 1979, when Lévêque's team unexpectedly discovered Neandertal skeletal remains associated with Upper Paleolithic artifacts within one of its layers. Despite this attention and the publication in 1993 of a monograph concentrating on the site, a decade later little anthropological information was available on the Saint-Césaire faunal assemblages, except for the EJOP occupation. During our meeting, it was decided that I would conduct an economically oriented analysis of the faunas from this site. Two years later, in 2001, I left Ann Arbor, Michigan, for the Université de Bordeaux I (Talence, France) to initiate the study of the sequence. The first days were particularly long and stressful. Shortly after, however, I made several new friends. Suddenly, the days became bright and much too short! Two stays, totaling sixteen months, were needed to complete the investigation of the selected occupations.

The data that I accumulated during my stays in Talence formed the basis of a dissertation, which I defended in 2004. My dissertation looked at foraging strategies across the Middle to Upper Paleolithic transition in western France. In the years that followed, I began to enlarge the scope of my analysis by including materials from other sites and other regions of Europe in the hope of publishing a monograph. In the early months of 2008, I read a thought-provoking paper published in 2006 by Jim O'Connell contrasting the diet breadth of late Neandertals and early modern humans. After reading it, I decided to reframe my analysis to test the productive ideas presented in that paper. The following twelve chapters summarize these efforts.

Generally, collecting large amounts of information involves much cooperation and help. This book is no exception. I first want to thank Bob Whallon, my advisor while at Michigan, for his support and inspiration. This book owes much to him.

My gratitude also goes to Norman Clermont, now retired from the Université de Montréal, who guided me through the early literature on human evolution. Norman's influence on this work is more profound than the preceding would suggest, however, as he introduced me, during my undergraduate years, to the exigencies of scientific thinking and data analysis. For this, I can never thank him enough.

I would also like to express my appreciation to John Speth, who spent countless hours discussing faunal problems with me. Many of the methods and ideas presented in this monograph were suggested or influenced by him.

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The analysis of the Saint-Césaire materials was realized within the framework of human behavioral ecology. This approach has much to offer to anthropologists because it can be used to make constructive predictions on change in foraging patterns. I am indebted to Cédric Beauval, Jack Broughton, Michael Cannon, Jean-Christophe Castel, David Cochard, Luc-Alain Giraldeau, Donald Grayson, Keith Hunley, Emily Jones, Lee Lyman, Natalie Munro, Filipa Naughton, John Speth, and Aaron Stutz for critical comments made on the various chapters that build on this approach. These comments contributed significantly to improve the final manuscript.

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The subjects treated in this book sometimes required the help of specialists from other disciplines. I am indebted to Frank Miller (Canadian Wildlife Service), Serge Couturier (Ministère des Ressources Naturelles et de la Faune, Québec), Eigil Reimers (University of Oslo), and Jim Schaefer (Trent University) for sharing information on caribou and reindeer biology. Caroline Pond from the Open University (England) kindly provided unpublished data on fat composition in various species. Francisco Palomares from the Estación Biológica de Doñana (Spain) shed light on various environmental factors that could have affected rabbit behavior in the past. Similarly, María Fernanda Sánchez Goñi, Stéphanie Desprat – both associated with the Centre National de la Recherche Scientifique (Bordeaux, France) – and Filipa Naughton (Departamento de Geologia Marinha, Laboratório Nacional de Energia e Geologia, Lisbon, Portugal) offered valuable assistance while I was analyzing paleoclimatic data. This book has also benefited from suggestions made by Michael Cannon, James Conolly, Aaron Stutz, and, more particularly, Robert Whallon with respect to statistical analyses.

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Finally, in addition to my family, this book is dedicated to the memory of François Lévêque, who passed away while I was completing this book. His assistance, kindness, and amiability will never be forgotten.

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