

Acknowledgment

No book is the work of its author alone. Moreover, a book like this, which is based on the investigations of so many researchers from so many different disciplines, is no exception to the rule. I cannot mention every person that sent me their work material and gave me permission to quote some aspects of their research. Although their names are not written on these pages, all of you are acknowledged for your help. I apologize if my presentation of their research does not give justice to those investigations.

This book is the result of a continuing effort since 1989, when I began to explore the possibilities of artificial intelligence in archaeology. I had the chance to work at that time in Paris, with Jean Claude Gardin, Henri-Paul Francfort, and Marie-Salomé Lagrange, who introduced me to the world of expert systems. Jean Claude has also agreed to write a foreword to this book, and I thank him for all he has done. Even if we may not always agree, I believe I am still a sort of “gardinist” in this modern academic world of labels and classifications.

After such introductory work, many friends in the archaeological discipline helped me to understand what it really means to be an archaeologist. I have collaborated or debated with people like María Eugenia Aubet, Luis-Felipe Bate, Hans-Peter Blankholm, Igor Bogdanovic, Ignacio Clemente, Xavier Clop, Ana Delgado, Jose Antonio Esquivel, Jordi Estevez, Maurizio Forte, Sorin Hermon, Luis Lumbreras, Gian Carlo Macchi, Laura Mameli, Glauco Mantegari, Jorge Marcos, Miquel Molist, Eduardo Moreno, Franco Nicolucci, Giuliano Pelfer, Pier-Giovanni Pelfer, Raquel Piqué, Billy Reynoso, Nick Ryan, Maria Saña, Stephanie Spars, Xavier Terrades, Iraida Vargas, Gonçalo Velho, and Assumpció Vila, among others at different places and diverse archaeological sites from Syria to Patagonia. Some of them allowed me to experiment with my technologically-inspired ideas in their projects. The contribution of Jordi Estévez and Raquel Piqué stands out, however. We have been working together for many years in several ways, both teaching at the Universitat Autònoma de Barcelona in Spain, and doing research on the same projects. In some ways, my views on archaeology and computing come from such collaboration.

Since 1991, I have been teaching “artificial intelligence techniques in archaeology” to graduate students at the Universitat Autònoma de Barcelona. Although many students were only moderately interested on that subject, Ferran Borrell, Iván Briz, Florencia Del Castillo, Alfredo Maximiano, Jordi Pijoan-López, Andrea Toselli, David Travet, Oriol Vicente, and Esther Verdún decided that the subject was interesting enough to learn a bit more, and they all began to investigate in their own way. They helped me to focus my attention in directions that I had never explored before. Two of them merit special mention. I have been working with Jordi Pijoan-López for many years on our project on neural networks for use wear analysis. Now, he has finished his PhD, and I was also finishing this book. We have made many things together, and many more wait to be done. Alfredo Maximiano was the last to join our laboratory on quantitative archaeology. Perhaps I have worked with him more than with any other. He is no longer my student, but a colleague looking for a way in his own, and a friend in many subjects, especially on spatial analysis. He has been able to understand my cryptic thinking, when I couldn’t understand what

I was thinking about. If my discussion on spatial analysis has some coherence, it is due to him. Jordi and Alfredo: thanks for everything, but of course, you do not have responsibility for the way I describe what we had been working on together.

Parts of this book comes from a former publication in Spanish. At that time, Professor María Eugenia Aubet from the Universitat Pompeu Fabra in Barcelona contributed to the funding and publication of that research. Afterwards, the Spanish Ministry for Education and Research, and the Spanish Ministry for Culture funded all my investigations through successive research grants awarded to me or to my colleagues Jordi Estévez and Assumpció Vila. The Catalan Government and the European Union also funded the acquisition of some software I have been using throughout the book, and provided grants and fellowships so some graduate students could work with me.

As lecturer at the Department of Prehistory, at the Universitat Autònoma de Barcelona, and head of its Quantitative Archaeology Lab, my institution also merits acknowledgement. The working conditions could not be any better and the University itself has funded some parts of the research presented in this book. Our research group is associated with the corresponding unit at the Institució Milà i Fontanals (Spanish National Research Council). Many aspects of the book come from our collaborative work, and the Institució has funded some aspects of this research.

This book would have been very different without the Computer Applications and Quantitative Methods in Archaeology Society. I participated in a conference in 1991 for the first time, in Oxford. Since that time, I have attended nearly all the annual meetings. It was there that I presented my first papers, and where the subject of artificial intelligence in archaeology evolved through time.

Some friends and colleagues read some earlier drafts of the book and made very interesting comments. I acknowledge the efforts by Geoff Carver, James Doran, John Fulcher, and Glauco Mantegari. Special thanks to Flavia Mameli for her help in grammar checking.

I am also grateful to the IGI Global, for accepting this book for publication, especially when I was losing any hope of seeing it in print. The publisher sent the book to three anonymous referees, who made important suggestions that I have tried to follow to ameliorate the book. Special thanks to all staff at IGI Global, especially to Jessica Thompson, my managing development editor.

This is a long list of acknowledgements, but no person or institution is responsible for any inexactitudes, errors, or mistakes that may remain in the text.

Far from the scientific background, I would never have finished this book without the love and patience of my family, although most of them didn't read a single line of it. My parents, my mother-in-law, my sisters, and sisters-in-law were always near me, giving full support when I needed it.

In the end, nobody deserves more acknowledgement and deep gratitude than Laura and Martí. With her immense love, Laura encouraged me to begin, to continue, and to finish what seemed at the very beginning to be a never ending story. She also discussed with me many aspects of the book. Being very critical with the "automatization" prospect, she helped me to clarify ideas, and to analyze previously unsuspected consequences of my former attitudes. Martí arrived in this world when the book was already on the desk, and when the writing seemed harder. It is not easy to write a book and take care of a child at the same time. I apologize for not playing with him as much as he needed. Even on weekends, neural networks seemed more important than telling him stories or playing with his building blocks. For those reasons, it is you, Martí, more than any other, that I dedicate this book.

The book is finally finished. I can forget about robots and archaeology for a while. I can come back to you again, my beloved Laura and Martí.