FOREWORD by José S Carrión Professor of Evolutionary Botany, University of Murcia

The natural inheritance of everyone who is capable of spiritual life is an unsubdued forest where the wolf howls and the obscene bird of night chatters HENRY JAMES. SR.

Al-Andalus – *A portrait* is a book on natural history. Then, it is also a survey on individual wonders and collective stupidities, a novel and an account, an essay and a report, everything written with chatty style and deep knowledge of the facts. This is a masterpiece, and I feel honoured to forward this book.

I do not share the common viewpoint that we scientists should keep sharply separated our professional activity from emotional inputs. I simply cannot believe our integrative brains are able to do that. Furthermore, I have come to be convinced of the contrary, that our psychological background penetrates every report, shape the goals of our projects, and exerts control upon every decision we take. And then, one is free to think on himself as a proper rationalist, and tells this tale to students and amateurs.

It follows that I will report unavoidably affected by the moods this book has rescued from deep inside my limbic brain. I guess not will be blamed of heterodoxy because, interestingly, this book deals with interactions, boundaries, and jumps of scale among conceptual things that science and philosophy have traditionally considered disparate, if not opposing. I am talking about the artificial abyss that "academics" have created between social and natural sciences. But, like art or poetry, they all depend for progress on inspiration, no matter what inductivists can argue. And this book is the outcome of a surely long-time gestated stock of good ideas about the interplay between individual men, societies and environment.

First at all, it is pertinent to introduce the author. Finlayson's scientific output has been prodigious. He is a confirmed evolutionary ecologist, although I have never seen him completely happy with the air of apparent inevitability of explanations based on natural selection. In Finlayson's research papers and books, one can see casuistries of the adaptationist programme, but it is clear that both ecological and evolutionary patterns would come to be for Finlayson something more erratic, let me say more wonderful. The author of this book is far from being a deterministic.

As a researcher, Finlayson has mounted two major campaigns. The first has been in support of the late survival of Neanderthals in the southwestern extreme of Europe. And about the circumstances of this unexpected permanence. He has been able to build a model of survival and extinction from a very complex set of interacting factors, a balanced scenario depicted from patterns of climatic variability, catastrophic events, genetics, biodiversity, evolutionary anthropology and physiography. The second bone of contention in Finlayson's scientific career, this more tenuously treated, has been that an ecological approach would facilitate to get out of the dialectic and methodological impasses that have made impossible a fruitful dialogue between palaeoanthropologists and archaeologists about the central themes of human evolution and dispersal. The solution to Finlayson is to go decidedly for a populational approach, which would make investigable many issues that remain nearly as conjectures or are continuously

submitted to circular reasoning. This involves to eventually disregard the biological notion of species, but after all, if something can be definitory of the palaeoanthropological databases is their scarcity and fragmentary character, both in time and space.

As a scientist, too, Clive Finlayson is one of the brightest I have ever met. He has been blessed by quick intelligence, artistic temperament, and a great ability to communication. Maybe of such success as to encourage plagiarism among reputed colleagues. I must confese to have become astonished while listening conferences and reading papers including Finlayson's theses without due recognition of the authorship. This is the tax of being imaginative. And after all, there is also great diversity of behaviours and temperaments in the scientific community niche. Some make trees, other survive with detritus, and there is also space for symbiosis, parasitism and camouflage.

My main excuse to meet Finlayson has been collaborative investigations about Late Quaternary landscapes of southern Iberia, largely auspiced by Gorham's Cave excavations and ongoing projects. At this position, I believed to know him well. Admittedly, after reading through this book, Mr. Finlayson has become to me a surprise package. It shocks me how can a specialist become a generalist, and then a popular writer in such a short time. I passionately conclude that if he was something in a previous life, might be one of those raptors that fly every year to nest from southern Iberia to the northern Namib, a long-distance migrator. For there is a serious distance between the way a limestone is formed, the Argaric collapse, the cave paintings of La Pileta and Ardales in Málaga, and the contrasting biographies of Willoughby Cole Verner and Pablo Larios. Thus, unexpectedly, this book includes incursions in the palaeontological arena (Neanderthals, the first Europeans), exploration, battles, trade, dynastic conflicts, the influence of fundamentalist attitude, .. all themes of paramount importance to illustrate ecological corollaries. The reader will certainly find outnumbered well-selected metaphors.

As this is not intended a preface, I will avoid myself going through the boring chapterafter-chapter description of contents. This is done in part by Finlayson at the end of his magnificent Chapter 1, Dances without wolves. However, I wish to give some guide of what the reader will find in these pages if he decides to adventure within. Especially because the content and format are a little unusual. I think there is a basic claim that understanding the links between people and landscape demands a millennial-scale perspective. What is emerging is that these interactions are substantially not so different in the Palaeolithic and the Anthropocene because the laws of the physics continue to be the same, and the main transformating agent, humans, have kept unaltered a behaviour that eventually provokes that vulnerable ecological systems cross their thresholds of resistance and enter irreversibly into a kind of fatal monotony. Making a step forward, I would say the main purpose of this book is to make a scientific argument for a compelling association, not to say actual overlap, between biodiversity and human past and future. The emphasis is on making readable a modern, multi-dimensional approach to historical ecology; how to cook chance and constraint, and make the meal enjoyable. For neither ecology or history are unified subjects with easily definable core of subject matters and unified approaches to their study. Ecological science itself encompasses many fields and can be extremely complicated to the novice. Ultimately this book is

about the thin, although not straight, line that exists between the fate of humans and the fates of other living beings. The final taste is that something crucial is at stake.

Ecologists and activists of conservationism may also get in conflict. For while acknowledging the brave defence of ecosystem protection measurements, they may become crossed at reading Finlayson's viewpoint of bull fighting and fox hunting as casual environmental preservers. And some statements may sound heretical to anyone who has been taught usual versions of the global change paradigm. Nevertheless, be sure that most of the stories are firmly grounded on new data as well as on new ideas. Needless to say, conservationism has often disregard scale, and although not in a blatant posture, this is certain for taxonomic, structural, spatial and temporal scales. Finlayson has taken courage. It is always difficult to buck the trend. That is true in any aspect of life. It is certainly true in science.

In connection with the former, and at the heart of this book lies a paradox. The more we learn about the relationships between physical setting, plants, animals, and humans, the more complicated it appears to be for the purposes of conservation policy. But Finlayson gives here several good examples of how beneath that complexity may lie deep simplicity. Take, for instance, the case of Griffon Vulture's recovery in the last few decades (chapter 2). Take yet the simple notion of eco-partitioning based on wolf presence (chapter 2). Implications are many, but the process of local extinction can be easily explained.

This reading can be started at your like. A nice way would be taking first the Chapter 16, which tells the magnificent story of José María El Tempranillo, a kind of Robin Hood of the Betic Mountains during the XIXth century. Chapter 18 (Eden Lost) is superb. It documents how, while Iberia still preserves today comparatively high levels of biodiversity, the situation was much better until the recent past.

Al-Andalus is shown by Finlayson like a contrasting land of glory and misery, of complexity, movement and flow, a land of all. Modern –politically right- concepts of historical nationalisms get demolished in the face of historiography. The reader will see here how boundaries can dance and how identities may be so fast diluted. We are the epiphenomenon of *al-Andalus*, that is, a shake.

I bet Finlayson will attain a huge level of public popularity in the next future. This piece is immensely readable. And even from the position of a specialist, I love when a colleague is able to write in a manner that made people see that science can be fun.