

# **EVERYDAY LIFE IN THE ICE AGE**

**A New Study of  
Our Ancestors**

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ARCHAEPRESS ARCHAEOLOGY



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Front cover: Reconstruction of a Solutrean woman and child by Elisabeth Daynès.  
Inside front cover: A group of Magdalenians, reconstructions by Elisabeth Daynès.

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# Contents

|  |     |
|--|-----|
| Preface .....  | iii |
| Don Johanson   |     |
| Acknowledgements .....   | vi  |
| Introduction .....   | vii |
| Chapter 1  |     |
| Introducing the People: Appearance, Abilities and Disabilities ..... | 1   |
| Chapter 2  |     |
| Setting the Scene: Ice Age Environments and Home Comforts.....       | 45  |
| Chapter 3  |     |
| Our Crafty Ancestors.....  | 77  |
| Chapter 4  |     |
| How to Make a Living: Survival and Subsistence .....                 | 115 |
| Chapter 5  |     |
| Ice Age People:From Womb to Tomb.....                                | 159 |
| Chapter 6  |     |
| Keeping in Touch:Communication, Social Life and Organization .....   | 203 |
| Conclusion.....  | 252 |
| Case Study   |     |
| El Mirón and Covalanas .....   | 255 |
| Appendix   |     |
| The Fake 'Venus' of Abri Pataud .....                                | 261 |
| References .....   | 263 |
| Figure credits .....   | 281 |
| Index .....  | 286 |



# Preface

## Don Johanson

As a paleoanthropologist, I have a deep interest in the human career, from the first fossil traces dating back millions of years to the emergence of modern *Homo sapiens*. My research has focused on Africa's Great Rift Valley, largely in the Afar region of Ethiopia where I discovered the Lucy skeleton in 1974.

What sparked my captivation with the Ice Age, that period between roughly 40,000 and 12,000 years ago, was a visit to southwest France in the summer of 1982, when I accompanied a group of people to the Périgord to view some of the painted caves of the Dordogne region. I have the most wonderful memories of my arrival in the quaint little town of Les Eyzies, the epicenter of French prehistory, and can recall admiring the Hotel Cro-Magnon, a stone building covered in ivy and topped with a red tiled roof. Going inside, I was amazed to see that the hotel was actually nestled into the cliff close to the Cro-Magnon Abri, which is how the early residents of that time (ancient but anatomically identical to modern *Homo sapiens*) got their name.

We seated ourselves in an intimate dining room perfumed with enticing kitchen aromas and were treated to a splendid meal: a silky *pâté de foie gras* with triangles of toast, followed by a *magret de canard*, then onto a traditional vinaigrette salad, a mind-boggling selection of cheese, and finally an *île flottante*, all washed down with a brilliant Pécharmant.

The next morning began with a visit to the spot just a few steps from the hotel where roadworkers uncovered flint tools and human bones in 1868. At that time, before the modern museum was built, a small plaque attached to the stone wall of the Abri Cro-Magnon was all that remained; the original human skeletons, grave goods, and artifacts are now displayed in museums elsewhere. As I photographed the site, I thought what a modest homage it was to this important discovery for French prehistory.

We then made our way slowly through the town eastwards, along the Avenue de la Préhistoire, for my first visit to a real *grotte ornée*, Font-de-Gaume. I was enthralled by the polychrome paintings of bison, horses, and other creatures portrayed by Magdalenian people, but it was the poignant depiction of a male reindeer licking the forehead of a kneeling female that made the deepest impression on me.

As the tour continued, I was surprised that each cave had its own distinctive character and flavor: each offered a unique variety of depictions of the bison, reindeer, mammoths, woolly rhinos, and horses who walked the landscape with our ancestors tens of thousands of years ago.

The final destination on the tour was the *pièce de résistance*, 'the Sistine Chapel of Prehistory' – Lascaux. Making the visit even more remarkable was that our guide was none other than Jacques Marsal, who with some boyhood pals had found the cave in 1940. It was clear his excitement had not diminished in the years since, and he said that from the moment he saw the paintings on the ceiling he knew the cave would always be a part of his life; he did, in fact, dedicate his life to protecting and preserving it.

My excitement grew as we followed Jacques to the imposing, art deco-like bronze door that stood between the modern and the ancient worlds. Before entering, we were instructed to dip our shoes in a disinfectant so as not to bring in spores or pollen that might grow on the walls and harm the precious art. Inside, the floor was compacted cave earth, and the air a little musty. Jacques gave us a moment for our eyes to adjust to the darkness, and with his flashlight, slowly illuminated the walls. I know my jaw wasn't the only one that dropped open! We stood in hushed reverence while he pointed out the bulls and horses, and details such as the black bear hidden in the belly of a large bull, and a mythical figure with two straight horns shooting out of its head, perhaps a human in an animal skin, who Jacques speculated was commanding the cavalcade of animals.

I felt an oddly powerful connection to the group of Cro-Magnon artists who had long ago stood where I was – squinting in the faint light flickering from crude oil lamps, they must have surveyed their stone canvas while deciding what to depict: A hunt? A death? Something otherworldly?

We followed Jacques deeper in, the ground sloping downward through a narrow opening which led to a gallery. In a whisper, he told us to look up. Then he flipped a switch and light shone upon stunning polychrome paintings on the ceiling that could only have been created if a scaffold had been built in the cave. Up to the right was a large black stag, heavily antlered, with a look of fear in its eye. Deer were also drawn in a sequence of images suggesting they were fording a stream. At the bottom of the narrow gallery was a screaming horse falling over a cliff.

I would love to have stayed for hours, but 40 minutes was the limit, and I exited the cave feeling a profound shift in my thoughts. I was intensely aware of the wind gently moving the top branches of the pine trees, and again I felt a sense of what these Ice Age artists must have felt after putting in a day's work. I will never ever forget that feeling.

Over time, my friendship with Jacques deepened, and he showed me the rarely-seen sections of the cave. One day, he crouched down, dug out a chunk of ocher from the wall, the very ocher used in some of the images, and gave it to me: '*Un petit cadeau pour toi.*' So who, exactly, were these ancient artists? Where did they come from? Did they have language like modern humans? Did they fall in love, did they grieve, did they create music, did they laugh? And what happened to them? Why did they become the dominant species, effectively wiping out their closest relatives, the Neanderthals?

To answer these questions, we need to review our human story. Research has shown that Neanderthals (*Homo sapiens neanderthalensis*) and modern humans (*Homo sapiens sapiens*) had a common ancestor (*Homo heidelbergensis*). The two lineages lived and evolved in reproductive isolation, Neanderthals in Europe and modern humans in Africa. The distinctive anatomy of Neanderthals developed in response to an Arctic-like landscape, where heat conservation promoted short, squat bodies, rugged, projecting faces, and elongated, oval skulls, while the tall, linear bodies of modern humans responded to the tropical conditions where heat dissipation was favored.

Both Neanderthals and modern humans were hunter-gatherers, but their tool kits were very different. Over roughly 400,000 years, the stone tool technology associated with Neanderthals demonstrated little advancement. In contrast, modern humans, as the result of a cognitively enhanced brain, invented a variety of specialized tools and weapons that were employed in highly successful subsistence strategies.

Shortly after modern humans arrived in Europe from Africa around 45,000 years ago with a superior technology, Neanderthals began a decline that culminated in their extinction. The details of that extinction are becoming better understood with continued exploration and discovery. The behaviorally and cognitively advanced moderns outcompeted Neanderthals, but not before there was some hybridization with moderns, as is witnessed in the human genome of today. Maybe the smaller and more sparsely distributed populations of Neanderthals were assimilated into modern humans and bred out into extinction.

In any event, they are gone and we are still here, asking questions, seeking answers. I will always have a passion for understanding how our Paleolithic ancestors lived, and I'm sure to refer often to this well-researched volume by Elle Clifford and Paul Bahn. We are all fascinated with this story because it is our story; it was our ancestors who celebrated their world through complex technology and boundless creativity. No matter what 'modern times' bring 'modern humans,' we must keep that creativity flowing.

## Acknowledgements

The teachers, friends and colleagues who have helped us over the years with information, publications and site-visits are far too numerous to mention, but they have all contributed to this book in different ways.

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## Introduction

‘These people are the forgotten us’ – Hugh Brody, *The Other Side of Eden*, 2000.

When reading *Everyday Life in the Ice Age*, you have to imagine a world without a written language – writing was invented thousands of years later. A world with only the most rudimentary scientific understanding. You also need to envisage ways of counting, measuring or telling the time that were very different from those we take for granted in the modern Western world. You might wonder how people managed to communicate, organise themselves, record their ideas and knowledge, predict the future, and teach their young everything they needed to know. We asked the same questions, and they became the starting point for this book.

We also wondered how our ancestors, living tens of thousands of years ago, survived the enormous challenges of the last ice age. How did they manage their everyday lives? It is important to stress from the outset that we are dealing with biologically modern people who were identical to ourselves both physically and (as far as we can tell) psychologically and behaviourally – they had the same intellectual abilities as us, but lacked our thousands of years of accumulated knowledge. Of course this applies equally well to their predecessors such as the Neanderthals!

It is safe to assume that Palaeolithic communities that existed by hunting and gathering were absorbed with watching animals, and learning everything about them – not only their habits, but observing them in every situation – as their survival depended on this very intimate knowledge. These very early versions of us also **must** have had a way of thinking and comprehending the world, and predicting the future in a clear and orderly manner. They also had to be able to communicate their thoughts and beliefs about the world they inhabited to each other and especially to their offspring. Only through doing this could they share experiences and knowledge, beliefs about causality, and establish agreed rules by which their communities and cultures could live.

The sharing and spreading of ideas are things we now take for granted – an idea can be transmitted across the world in a matter of seconds these days. But when long-distance communication began, it would have been a huge step for mankind, and it may have started well before the last ice age. Likewise, the most significant and dramatic changes in human cognition and behaviour seem to have appeared during this protracted period.

All cultures have their own ‘world reality,’ and most of us have never experienced a way of life other than our own. As a consequence, it is difficult for us to imagine how it feels to live a hunter-gatherer lifestyle. In this regard, we owe a debt to a number of anthropologists who have spent years – even decades – living with indigenous groups whose lives are very different from

our own. Their commitment to understanding another culture's beliefs about the world is invaluable to our understanding of our early ancestors' existence in small hunting and gathering communities. Not surprisingly, anthropologists report how difficult it is to convey to us, with our 21st-century perspective, how indigenous people see their world. This is in no small part because their way of life, and their understanding of reality, are beyond what most of us in Western society – with our own beliefs, values, social norms, traditions, politics and technology – can grasp intellectually. It is nevertheless important for us to try and understand their viewpoint, as it is central to who we are as human beings, and to the cultural development of our early ancestors over these early millennia.

Thanks to the dedicated work of generations of archaeologists, we now have a wealth of evidence to help us understand those ancestors, and to open a virtual window into our deep past. What we have attempted to do in this book is piece together the (inevitably somewhat incomplete) picture of how ice age people lived. From the physical evidence archaeologists have discovered, we have endeavoured to make plausible, but cautious deductions as to how our early ancestors thought and behaved during this period of our cultural evolution. Where we don't know, we say so; and where we are speculating, we make it clear. We strive to be as honest as possible.

The book incorporates four different kinds of evidence – 1) archaeological data of all kinds – sites, features, artifacts, art objects, human skeletal material, and animal and plant remains; 2) ethnographic data from historic and modern hunter-gatherers, to fill in some gaps in our knowledge of prehistoric life; 3) knowledge of basic human behaviour, needs and anatomy; 4) knowledge of the behaviour and tolerances of animals and plants.

This is the first work of its kind ever published in English, and offers readers an exhaustive and realistic picture of life during the last ice age, with its many problems and challenges. We hope that it will dispel some of the many myths and assumptions about our early ancestors.

There have been a number of popular books on Neanderthals, who preceded us in Europe and elsewhere, but far fewer on our own species. Our book takes a different approach to presenting the way humankind developed socially and psychologically. It looks at every aspect of the lives of biologically modern humans in Europe, from circa 40,000 to 12,000 years ago – a time of radical changes in climate and environment. It explores how people were able to cope with and adapt to sometimes rapid changes. The way communities developed had a great deal to do with their resources in the geographical areas they settled in: the climate, landscape, vegetation, and animal life. These variables were pivotal to the development of these early groups – their social structures, economic activities and practices and (although they remain elusive) their ideas and beliefs about the meaning of life.

Humans have always needed to process information about the world around them, they need to be 'efficient' at remembering important stuff, and they need cooperation from other members of their group and community. During the ice age – particularly in the severest conditions – survival would have been a daily operation, and organising their lives as extended families, in groups, and coordinating and learning from each other's experiences, would have required a sophisticated level of social intelligence. Consequently, our early ancestors would have been pushed to the limits of human potential and ability just in order to survive!

The Upper Palaeolithic may have been one of the most important stages in human history. This period has produced evidence for a dramatic change in human thinking and behaviour, although we still have much to discover about the origins of human psychology – and this crucial stage of our development. Psychologists predict human behaviour, but rarely do they look back and engage with history to understand the origins of our behaviour. Appreciating our ice age past can help us understand what it means to be human.

We hope that the book will encourage more specialists to examine aspects of prehistory other than the minutiae of stone tool typology – in other words what Upper Palaeolithic tools might have been used for, and the lives of the people who made and used them. We would also like to encourage debate in order to produce a more rounded view of ice age life and behaviour.

Although the book focuses almost entirely on Europe, much of what we present is equally applicable to other parts of the world during the same period. It is worth bearing in mind that from 40,000 to 12,000 years ago represents about 1200 generations – and is 15 times longer than the period separating us from the year 1!

It goes without saying that our book cannot be exhaustive. Many hundreds of sites of the period are known throughout Europe, containing thousands of artifacts and probably millions of stone tools. From this mass, we have selected examples that we feel to be of major importance or interest and that shed significant light on ice age ways of life. Many of them are in the French Pyrenees, partly because this region has been studied for 150 years and one of us studied its prehistory for a doctoral thesis, but also because it presents particularly good or important examples of some of the aspects of ice age life. And whereas most studies of the last ice age focus on a catalogue of tool types, we prefer to concentrate on what tools were used for!

Similarly, out of a vast bibliography in many languages, we have only been able to highlight those works which we have found most useful, important or informative.

We have chosen not to present things in chronological order, as most aspects – unless specified otherwise – are applicable to the whole period. Precise dates are of little use, and are distracting to the general reader, so we have not systematically standardised or calibrated them.

## CHRONOLOGY

**Upper Palaeolithic** – the Upper Old Stone Age.

**Pleistocene:** the period from c. 2.5 million years ago to c. 12,000 years ago. This book covers the last part of the Pleistocene.

Much of our book deals with aspects that apply to the whole period, but occasionally we will refer to specific phases, so it is important to present their names and timespans here in calibrated years. Bp means 'Before present'.

|                     |  |
|---------------------|--|
| Aurignacian:        | c. 38,000 bp (cal. 41.5 – 35 ka, though earlier in some areas) |
| Gravettian:         | c. 30,000 bp (cal. 35 – 25 ka)                                 |
| Solutrean:          | c. 23,000 bp (cal. 25 – 22.5 ka)                               |
| Early Magdalenian:  | c. 21,500 bp (cal. 22.5 – 20 ka)                               |
| Middle Magdalenian: | c. 17,500 bp (cal. 20 – 15 ka)                                 |
| Late Magdalenian:   | c. 14,000 bp (cal. 15 – 13 ka)                                 |