

THE MEDIEVAL DISCOVERY OF NATURE

This book examines the relationship between humans and nature that evolved in medieval Europe over the course of a millennium. From the beginning, people lived in nature and discovered things about it. Ancient societies bequeathed to the Middle Ages both the Bible and a pagan conception of natural history. These conflicting legacies shaped medieval European ideas about the natural order and what economic, moral, and biological lessons it might teach. This book analyzes five themes found in medieval views of nature – grafting, breeding mules, original sin, property rights, and disaster – to understand what some medieval people found in nature and what their assumptions and beliefs kept them from seeing.

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In memory of David Herlihy



How to gain, how to keep, how to recover happiness, is in fact for most men at all times the secret motive of all they do, and of all they are willing to endure. [Yet]... the first gift of natural existence is unhappy.

William James

The purpose of Nature is the happiness of humanity.

Adam Smith

The natural is always without error.

Dante Alighieri

Nature is Life.

Pliny the Elder



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ABBREVIATIONS

PG J. P. Migne, Patrologiae cursus completus: Series Graeca, Paris 1857-66

PL J. P. Migne, Patrologia Latina, Paris, 1844–55





PREFACE

This brief preface must explain the title and scope of this book, before the introduction launches the reader into Nature as some ancient and medieval people found it. First, Nature with a capital "N" means the living ecology of this world, what we today call the biosphere. Although standard advice on writing holds that an author should stress what the book covers and not what it excludes, the fuzziness of Nature, even narrowly defined, requires a warning label for the readers. Nature in this book does not include the cosmos outside this Earth and hence omits that favorite medieval science - astronomy. Nor does it engage the planet's nonliving chemistry manipulated and studied by alchemists. The supernatural is often relevant and theological works provide some important witnesses to Nature, but what has been called the theology of nature, or natural theology, or indeed the heaven above or the hell below us, are not our subjects. Fortunately, Dante wrote a natural history of Inferno and Paradiso, and Pliny the Elder, perhaps the first natural historian, ably covered the Earth he knew. Human beings, as much a part of Nature as the plants and animals frequently appearing in these pages, are our subject, although we are not so much interested in that part of Nature between their ears, the processes of the human mind.

What premodern people found in Nature was first and foremost themselves, their bodies, what they were, and what it meant to be here. It is certainly true that they also found there the means to food, clothing, and shelter – the basics of life fundamental to any economic history of the Middle Ages. But these vital activities are not our focus. Because Nature is such an immense subject, its discovery may appear a presumptuous endeavor, by contemporaries or posterity. A path through this immensity will be inheritability – how living beings in Nature make copies of themselves, how like produces like. In turn,



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this theme will raise more questions about how people affect Nature and how it shapes them.

What people discovered in Nature by living in it turns out to be a series of ideas that form the chapter subjects of this book and they will be explained in the Introduction. Unfortunately, there are very few medieval naturalists or proto-ecologists to study so we must look for sources in almost every genre of writing. Yet, it seems best to avoid the lexical fallacy that presumes that the absence of a word indicates that the subject did not exist. As we will see, medieval people of all types had plenty to say about Nature in our sense. And this did not mean that they simply copied Pliny or provided a tenuous bridge from the Ancients to the Moderns. There is something more to what medieval people found in Nature.

Finally, this is not a scrapbook in which I have used the scissors and paste options to assemble some images of Nature depending on the vagaries and happenstances of my reading. In biology this kind of cobbling together of data is known as *bricolage* and has become in the humanities and social sciences a way of doing scholarship. I do not intend to belittle this approach, for how else could we learn what the best readers have found? But the reader is entitled to ask whether or not the slender threads of explanations in these chapters represent a broad path of important premodern insights or simply some cranky dead ends. In other words, is what I have found in the sources at all worthwhile to you? Only the slow process of reading and response will settle that question. I am painfully aware of the gaps in my reading and the omissions in this book. My hope is that some readers will be encouraged to press forward to correct these flaws.

The plan here is to investigate a problem – what premodern people discovered in Nature – not by picking up what is lying around in the libraries and archives, but by asking a series of questions and putting the results between these covers. Like many such endeavors, these findings as an entirety, never gathered in one place before, are simply one way to assemble the pieces of evidence into a coherent pattern. My twenty-first-century interpretations, written in light of Nature's past five centuries and with tools unavailable to premodern proto-naturalists, would be impossible without their discoveries and theories.



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