the field of environmental history itself, which began with a focus on wilderness areas but has since steadily broadened its scope to include everything from the septic tanks beneath our lawns to the milk in our refrigerators and the cars in our garages. Environmental historians have been busy demonstrating that the natural world is everywhere we look. If that is truly the case, then we must also look beyond the earth. It is time to extend the field’s horizons once more and move toward an environmental history of the universe.

With such an approach, the century after Galileo’s discoveries begins to look like a radically transformative period in the way that human beings thought about the natural world, a time when the universe beyond earth was pulled into the realm of environmental thought through a dramatic expansion in humankind’s environmental imagination. Although writers from Lucian to Dante had previously created fictional representations of the lunar world, the moon (and eventually the planets) suddenly seemed like a real place that people could actually see themselves visiting. As a result, some of the finest scientific minds of the century turned their attention to puzzling out the nature of the lunar environment. They knew so little about the moon that they often used semifictional works to explore ways of thinking about it, combining known scientific facts with a healthy dose of imagination. Yet they produced a good deal of serious thought about extraterrestrial environments and provided important momentum to an intellectual tradition that continues today in the modern field of astrobiology.

The seventeenth century saw the first sustained scientific conversation in human history about the environments of other worlds, and it was a conversation with considerable historical impact. It influenced European literature, promoted new interactions between the celestial and earth sciences, stimulated colonialist thought, and sparked the first serious inquiry into the possibility of space travel. The expansion of the environmental imagination to take in the entire universe prompted nothing less than a revolution in environmental thought, one that had to take place in order for our current age of exploration to have even been thinkable.

THE ROOTS OF LUNAR NATURE

Before the seventeenth century, Western knowledge about the lunar environment remained rooted in the thought of the ancient Greeks, whose theories were often more the product of philosophy than reasoned observation of the moon itself. Particularly popular by the early modern period was an elaboration of Aristotle’s claim that the celestial spheres were perfect and therefore perfectly smooth.