## SCIENCE'S COMPASS

tle as the present volume (5), one whose author did have the courage to synthesize. Science is not only about what we know, but also how well we know it. Not all of the evidence discussed in this volume's various chapters is of equal value; some of it is very probably misleading or its implications misunderstood, and some may even be just plain wrong. Courage is needed as well to sort through the conflicting data. Perhaps a strength of the book is that it exposes the fractured state of knowledge about planetary origins, and thus forms a good foundation for future endeavors.

Origin of the Earth and Moon is very competently produced and reasonably priced for an academic tome. It goes without saying that it deserves a home in every planetary scientist's library. Unfortunately, this will not result in best-seller status. The exploration of the solar system has been grossly under-appreciated as an intellectual adventure.

Before the era of space travel, our understanding of Earth had been held back by the problem of uniqueness—we had on-

NOTA BENE: ENVIRONMENT

## **Sounds of Silence**

has found an inspired way to bring scientific issues to the attention of a wider audience—through music. With the Philharmonia Orchestra, it commissioned a symphony from Peter Maxwell Davies,

Antarctic Symphony
Peter Maxwell Davies

Information on performances is availabe at www.maxopus.com

who traveled to Antarctica in the austral summer of 1997–1998 in preparation for the work. The British composer led the Philharmonia in the premier

of the resulting *Antarctic Symphony* at Royal Festival Hall, London, on 6 May; an upcoming performance in Scotland will be broadcast on BBC Radio 3 on 27 June.

The work consists of a single movement in which the composer weaves sounds based on his Antarctic experiences (some created with unusual instruments such as a biscuit tin filled with broken ly Earth itself to study. The Apollo program changed this. In particular, exploration of the Moon fostered thinking about Earth from an expanded perspective. One consequence has been the growing awareness of Earth's special qualities and how very rare the circumstances leading to the formation of a habitable planet might be. Could Earth and its life be unique?

I would like to believe that this subject would be central to the intellectual aspirations of all people, whatever their cultural background. But the list of authors who contributed to this volume reveals a sorrier reality. More than 50 of the 66 are from the United States, and most of the others work in Japan and Germany. Although the conference's California location may partially explain this bias, the participation is also a fair reflection of activity in the field. Sadly, there is nothing at all from anyone still practicing science in the former Soviet Union. Maybe current economic woes are to blame there. Yet the science discussed in this volume is not expensive to carry out. and the costs hardly excuse other countries

glass) into a fabric of classical music that evokes his impressions of the continent. Among Davies's inspirations were the sounds of the ship breaking through sea ice and of an avalanche of snow enveloping those on deck when the ship passed through a narrow channel—which he found "more profoundly quiet than the previous silence."

The symphony also commemorates the 1953 Sinfonia Antarctica, which Ralph Vaughan Williams (who never traveled to Antarctica) developed from his own score for the film Scott in the Antarctic. I would have liked to have heard the two pieces in succession.

A wealth of beautiful pictures and the composer's diary from his trip have been combined in a book, *Notes from a Cold Climate* (Browns, London, 2001). The BAS and the Philharmonia Orchestra have also collaborated on an accompanying education project, Antarctic Waves (www. antarcticwaves.com). This toolkit will offer Antarctic sounds, images, and scientific data to help high school students create music.

-JULIA UPPENBRINK



that are conspicuously absent from the list of authors despite their cultural and intellectual pretensions. I hope that the perspectives offered in *Origin of the Earth and Moon* will catalyze more widespread international interest in the subject.

## References

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A DAY OUT: PLANT ECOLOGY

## **Paradise Regained**

Sandra Knapp

the garden of Eden in the Bible was the paradise from which humans were banished. At the Eden Project in Cornwall, we are welcomed in to discover how we interact with and influence our environment through our actions and our lack of action. In a reversal of the Biblical creation myth, this garden is conceived with the acquisition of knowledge at its center.

The Eden Project is a world of superlatives: the world's biggest greenhouses, built using the largest free-standing scaffolding; the "compost heap to beat them all," for the making of 85,000 metric tons of soil. It

aims to change the way we think about the world we inhabit. To facilitate this goal, the project is enhancing the presentation of the

The Eden Project Bodelva, St. Austell, Cornwall PL24 2 SG, UK. www.edenproject.org.uk/

plant collections with commissioned art from a range of media including sculpture, music, animation, and performance. This ambitious and poetic vision has inspired many in a country where another giant dome built to mark the Millennium instead sparked controversy and unseemly bickering. The project opened this spring with a blaze of publicity in the midst of the footand-mouth epidemic, and it has far exceeded its visitor targets.

But is this Eden really paradise? Does it make places like London's Kew Gardens obsolete and old-fashioned? And most importantly, will its future really be as solid and sustaining as the drama of its creation? We went to Cornwall to see how the

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