

Cosmology is a strong theme within the garden of landscape designer Charles Jencks.

Q&A Charles Jencks Cosmic gardener

Charles Jencks designs landscapes and sculptures to convey concepts in astronomy, biology and mathematics — notably at CERN, Europe's particle-physics lab near Geneva, Switzerland, and in his Garden of Cosmic Speculation near Dumfries in Scotland, UK. On the launch of his new book, he discusses green architecture and metaphor.

Why use landforms and landscapes to express scientific ideas?

My book *The Universe in the Landscape* describes my designs at all scales, from small gardens to a restored open-cast coal mine. They mix different media — architecture, sculpture, planting and epigraphy — to interpret basic ideas of the cosmos. I see turf mounds as a medium through which we can interpret a larger cosmic nature. This endeavour parallels those in prehistory, when people made landforms such as the stone circles of Brodgar in the Orkney Islands and Stonehenge near Salisbury, UK.

How did you get involved with CERN?

CERN's director-general, Rolf Heuer, and his team asked me to collaborate on a project at the centre of the Large Hadron Collider. They had built a wooden dome, which they call the Globe of Science and Innovation, and I argued that they should make a

The Universe in the Landscape: Landforms by Charles Jencks CHARLES JENCKS Frances Lincoln: 2011. 256 pp. £40 landscape around it. I talked to many scientists, including the astronomers Martin Rees and Bernard Carr, who suggested using uroboros, the

alchemical symbol of a snake eating its tail. One goal of science is to reconcile relativity and quantum theory. No one knows which will swallow which: will the large explain the small, the small explain the large, or neither?

What will the CERN landscape look like?

As an overall strategy, a connected landscape will protect what little green land remains around the Globe. I have proposed a design in the shape of a modified uroboros — a ring that connects steps in the relative scale of objects in the Universe, with a question mark for the snake's head. CERN's particle collisions have become a sculptural icon used for

architectural details: in the form of an eye, with rays exploding outwards from its central point. The construction could be finished in three years.

How does your Garden of Cosmic Speculation explore cosmology?

There is a 'Universe cascade' where water runs down and time runs up, in a series of stone steps that show the history of the Universe. As you walk up the steps, jumping from platform to platform, you see the Universe slowly unfolding from its origins in the mists of the quantum soup. Mathematical physicist Roger Penrose asked me, "How could you build superstrings in concrete when they are so clearly going to be proven wrong in ten years?" But you enjoy the play of uncertainty in a garden. You can revise your work when you make mistakes. Besides, they date the design precisely at the point we believed these theories.

What was your intention in building it?

The garden is a project started in 1988 with my late wife, Maggie. We tried to translate some of the metaphors of science into land-scape design. There is a DNA garden with six cells whose walls are made up of various plants. At the centre of each cell is the nucleus, and at the centre of the nucleus are six versions of the double helix, unfolding with RNA coming out to be read by plants that represent ribosomes. It is a critical look at the relationship between DNA and the cell.

How is science changing architecture?

Recent attempts to pull together complexity theory and architecture have led to an enormous amount of design, but not much of it has been built or is convincing. However, computers are transforming architecture. Architect Frank Gehry uses software written by French aerospace engineers to design curved buildings. And Zaha Hadid and her students in London are putting forward 'parametric architecture', which uses rules to generate appropriate designs.

How do you see the role of architects in future?

Every time an architect designs a building, they are predicting what will be relevant for the world in the coming decades. They must also persuade clients and society. Foster and Partners, one of the greenest architecture firms on the planet, got the Reichstag in Berlin running on vegetable oil. But they also build expensive skyscrapers. The problem for the profession is that architects do not control enough of the building process to lead the green agenda. But they should try. You fight the right battles even if you do not expect to win the war.

INTERVIEW BY JASCHA HOFFMAN