Mariko Mori draws on the spiritual traditions of her native Japan and the mass-produced materials of the West to give her work an ethereal quality. Her new show at the Royal Academy leaves Adrian Hamilton entranced.

This winter's solstice on Friday (21 December) marks the end of the world according to the Mayan calendar. But then, lest you run for the bunkers, the end of one time, according to the Mayan and many ancient civilizations, merely presages the beginning of another in the endless recycle or birth and rebirth.

It's the thought that occurred to the Japanese artist, Mariko Mori, when asked to provide an installation for this time at the Royal Academy. Intended for the courtyard it has become a whole show to kick off the Academy's programme to turn its rear building, in Burlington Gardens, into a regular space for international and contemporary art outside its own membership.

Called Rebirth, the show revolves around the death and new life of a star but reaches far wider into meditations on the ancient wisdom of astronomic knowledge and the reach for the universal and the eternal that lies at the centre of the Buddhist and Shinto thinking of her native Japan (she now lives in New York).

Merely to say this is to risk ridicule. The British have always been quick to lampoon what they regard as portentous. If the politicians don't "do God", the public at large don't discuss the spiritual either. And, indeed, there is something risible in all those mood- music discs and self-help manuals intended to make you serene and untroubled.
The strength of Mariko Mori, prim, tailored, with dark black hair done in two buns at the back, is that hers is an art that doesn't seek to reassure but to draw you into her own search for the universal. Studying Buddhism, she is fascinated by what she calls the "inner light". Being Japanese, however, she also has an innate ability to mix perfect simplicity with modern technology and mass-production materials.

The exhibition begins and ends with high technology devoted to the stars. At the start is one of Ms Mori's best-known and most effective works, Tom Na H- iu II, in the form of a large LED –light monolith of glass and stainless steel. The explanation is intellectual. The name comes from the Celtic "Tom na h- iubhraich", meaning the stone portals though which souls passed on their return to Earth. The technology is advanced. The hundreds of lights within the five-foot high "rock" are connected to a computer at the Institute of Cosmic Ray Research at the University of Tokyo. As the centre detects the particles, or neutrinos, arising from radioactive decay in the atmosphere so the lights within the monolith flash and fade and change colour depending on what sort of particle is being detected.

All very impressive. But you really don't need to understand any of it. What you see, and what engages the eye, is an object at once solid in its glass texture, monumental in its size but alive and endlessly rhythmic in the brightening, fading light that comes from within it. So too with the other "star" work that comes at the end of the show. White Hole is a vision of new life released from the black hole at the centre of the universe. A tilted disc, the light within glows and drifts around the edge and weaves around the centre in slow motion. Quite entrancing.

Displayed also are photographs and a short film of her latest, and most ambitious project, to install cosmic-style structures on the inhabited continents of the world. The first, Sun Pillar, half completed in a bay on the island of Miyako off Japan, is based on the ancient symbolism of a pillar and circle representing regeneration and the Sun and Moon. A translucent flexiglass pillar has been set on a rock so that its shadow reaches a "Moon" structure in the water at winter solstice. The pillar reflects the colours of sky and sea around. The "Moon" changes colour in response to the phases of the Moon and tide. Next up is a work in Brazil timed for the next Olympics.

If these works consider the skies, her static installations, drawings and sculpture reflect the works of man in trying to calculate and represent the firmament above and the life below. The circle, or "mandala", has long been the focus of Buddhist art as it has been of ancient structures concerned with the astronomical and religion. A series of photo paintings, Connected World, use interlocking ellipses of bright-coloured plastic to enclose organic shapes.

Increasingly drawn to the prehistoric Jomon culture of Japan, Mariko Mori has also elaborated a number of structures based on the ritual pattern of stones and rocks found in Japan, as in the Celtic world. A coincidental show at the British Museum, which held a remarkable exhibition of Jomon "dogu" three years ago, displays several masterpieces of vase and utensil from this fascinating culture. However, the more conceptual the work, the less it seems to me to succeed. Faced with a scattering of ceramic flat stones, as in Primal Memory, or upright LEDF stones in Transcircle, your immediate response is to try and work them out not go beyond them.

That may be a Westernised way of looking at it. The Japanese have a particularly fluid manner of moving between the spiritualism of Buddhism and the animist religion of Shintoism, whereas Christianity set out, and in large part succeeded, in wiping out the connections to the "old" beliefs in Earth, nature and the stars. In her star works, and in her drawings, Mariko Mori succeeds brilliantly in representing what is beyond representation. One hopes that the sheer technical challenges of the major installations she now plans don't drag her back from the ethereal. She is one of the few artists attempting it.

*Mariko Mori: Rebirth, Royal Academy of Arts, London W1 (020 7300 8000) to 17 February; Flame and Waterpots: Prehistoric Ceramic Art from Japan, British Museum, London WC1 (020 7323 8181) to 20 January*
Mariko Mori: ‘Sun Pillar’ (2011) Mariko Mori

Mariko Mori: ‘Transcircle’ (2004), Mariko Mori
Mariko Mori
David Sims

Mariko Mori