IT WAS in Borromini’s church, San Carlo alle Quattro Fontane, in Rome that Richard Serra first saw the light a decade ago. “I was standing in a side aisle, looking at the oval space on the floor and the same oval on the ceiling, called a Borromini ellipse. I thought they were at right angles to each other. When I moved to the central aisle, I realised I was wrong. But I kept on wondering: how can I create—how can I actually make—my misrepresentation?”
Whether it is his drawings (made with melted paintsticks), his famous Torqued Ellipses or the Torqued Toruses described above, the quest to change procedure and make something unforeseen has been at the heart of much of what the 69-year-old American artist has done. In his early years Mr Serra preferred not to work in steel, which he had known from the second world war when his father worked as a pipefitter in a shipyard. “It was the most traditional material of the 20th century.” Only, he says, when he was able to imagine using steel's weight, gravity, mass, cantilever and balance did its potential in art begin to interest him.

After his 40-year retrospective at the Museum of Modern Art (MOMA) in New York last year and a highly acclaimed installation at the Grand Palais in Paris this summer (visited, to Mr Serra’s amazement, by the president, Nicolas Sarkozy), the sculptor has now brought his magnificent metals to London. Dressed all in black and wearing MBT trainers to relieve the pain from an old back injury, he has spent days overseeing the complex installation.

His three new pieces seem to burst out of the white spaces of Larry Gagosian’s gallery near King’s Cross station (where they will be on show until December 20th). The first work that greets the visitor is two Torqued Toruses. These are technical words to describe the form wrought from the metal, though the names do little to bring to life the response evoked by actually standing within these soaring shapes. Taller than the versions Mr Serra made for the MOMA show, as well as more elongated—("I wanted to make them better," he says)—these works are at once secretive, magic and forbidding.

The long slab of steel—with weatherproofing so coated and coloured it resembles a giant painting—that dominates the side room is more disconcerting. Though there is room to walk round it, the piece is so strong that it seems to divide the room in two so that the viewer is never certain what is happening on the other side. The sculpture is named after Fernando Pessoa, a Portuguese poet, whose musings about “dream ships” and the scale of human ambition inspired the work.
Pessoa’s words provide a link to the third piece in the show, “Open Ended” (pictured above), which is the resolution of the challenge Mr Serra set himself in Borromini’s church in Rome. Two ellipses in soaring steel have been set one within the other. The visitor, making his entry at the narrow end of the oval, feels at first as though he is walking in a slanted corridor. By the time he reaches the other end and looks back, he feels more as if he were standing on a dock gazing up at the prow of a huge ocean-going vessel, perhaps one of Pessoa’s dream ships. If he walks on a bit farther, this time towards the middle of the work, the sense of what surrounds him changes again to give the feeling of being inside a maze.

There was a time when an emotional response to abstract sculpture was still so new it sharply divided those who came upon it. That it now seems normal is a measure of how far once-radical work, such as this, has been accepted as mainstream. But Mr Serra, famously driven, takes no time to rest.

Between trips to London and his foundry in Germany, he is building a piece for Norman Foster’s garden near Geneva and discussing the possibility of building something for the courtyard of the Prado in Madrid. He explains what is at the heart of his Borromini inspiration: “As the piece rises in elevation, it not only leans in but torques and turns outward. The radius never changes.” And then he adds proudly. “That’s never been done before in the history of form-making.”