Science in culture

Deacon's nucleic acid

A DNA anniversary project took shape in an unpredictable way.

Martin Kemp

R. DEACON/LISSON GALLERY

DNA with a twist: Richard Deacon's *Out of Order* has evolved its own 'molecular' structure.

Major artistic projects, like scientific research programmes, can develop in unanticipated directions, although in this era of predefined outcomes for grant-funded projects in academia, the truly unpredictable is increasingly factored out. Where there is no contract with a funder, however, the constraints are absent — but so, generally, are the necessary resources.

These remarks preface the story behind the genesis of an important piece of sculpture recently completed by British artist Richard Deacon in response to a scheme to celebrate the 50th anniversary of Watson and Crick's seminal discovery of the structure of DNA. In 2001, Philip Campbell, the editor of *Nature*, approached me and my colleague Marina Wallace with the idea of stimulating a substantial piece of sculpture to commemorate the anniversary. None of us wanted a straightforward representation of the double helix, which has entered the world of visual cliché. Reviewing possible artists, we settled on Deacon, who had an impressive record of generating large-scale constructions, especially in wood, that look like 'real' things from the organic world but are in fact entirely invented.

Deacon took up the challenge enthusiastically, undertaking background research. The Gulbenkian Trust generously offered set-up money, and a full budget proposal was developed. Surprisingly, no major funder came forward.

But Deacon was undeterred. Carried forward on the wave of his creative impetus, he assumed the risk himself — and broke free of constraints. The developing work began to take on a fascinating life of its own in a process of visual and physical dialogue with its creator.

Deacon commissioned the making of a series of strongly bent and fiercely twisted oak components according to a set repertoire of barley-sugar twists, and 'fast' and 'slow' curves. His demands literally stretched the wood to its limits. The torsions were not the result of predetermined pressures in a machine but arose from progressive forces instinctively applied to the steamed timbers by two human operatives, whose eyes, ears and hands provided the most sensitive registers of when breaking point was near.

The components were at the centre of an interplay between Deacon's visualization, the wood's inherent structural possibilities, and what seemed to be the self-organizational needs of the growing sculpture. Originally, the parts were arranged into four separate but related wholes, like the subunits of a large molecule. Then, suddenly, they came together, bolted and bonded, with a meandering and twisted spine from which sprays of ribbons launch themselves into space at skewed angles, seeking connections. The sculpture seems both closed and open, depending on the viewpoint.

The result, without any defined intention, is uncannily evocative of a ribbon model of a large protein molecule or nucleic acid as generated by a graphics programme such as MolScript. It is at once precariously dynamic and structurally poised. A piece of sculpture as large as this (700 × 570 × 190 cm) writhing in a confined space could well feel threatening, but those who witnessed its unveiling at the Lisson Gallery on 1 May could be seen smiling at its joyous vitality.

Deacon's magnificent sculpture is no longer about DNA. Its title is metamorphosing from the genetically orientated *Out of Africa* to the more abstract *Out of Order* (suggesting, among other things, the emergence of unpredictable complexity from a limited set of basic parts). But its rootedness in a conceptual process akin to that which allowed Watson and Crick to see the structure of DNA remains central to its formation.

Where now for the sculpture? In the short term it is to cast its spell in Tampere in Finland and Vitoria in Spain, where it will no doubt prove itself to be a show-stopper. Where it will find a permanent home is still to be determined.

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Out of Order will tour European venues next year in a major exhibition of Richard Deacon's work, starting at the Sara Hildén Art Museum in Tampere.

the now-47-year-old French bachelor savant.

Exile to the Prussian cultural hinterlands turned out to have limited charms for Maupertuis. He never mastered the language; he was irritated by German philosophers' preference for Christian Wolff's version of leibnizian metaphysics; and he got caught up in a nasty, and ultimately petty, polemical exchange with Voltaire, Frederick's other prize French catch. His health already suffering from the Prussian climate, Maupertuis faced personal disaster when Frederick and Louis, the two absolutist sovereigns to whom he owed allegiance, went to war with each other in 1756. Maupertuis died three years later, fittingly in Basel, about halfway between Paris and Berlin.

Maupertuis' life exposes some of the tensions that existed between the cultural powers of princely patronage and Enlightenment ideals of intellectual republicanism. This well-crafted biography is one of the better studies of the problems and opportunities of the eighteenth-century scientific career under the conditions of absolutism. ■

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