



UMBILICAL

UMBILICAL charts the 25 year journey of the artist's Ropemaker series, developed as a means of exploring ideas about perception and our constructed realities. While the full Ropemaker series includes many more mechanised machines, this show focuses on three key works. Yarn (2001) dates back to the artist's time at the Slade and is considered his first mature work. It was selected for New Contemporaries in 2001. Next is Ode to the Difference Engine (2007), the last work the artist built entirely using his modular structural oak system. It was the centrepiece of his first show at Victoria Miro and serves partly as a homage to the life and work of Charles Babbage, and a lament for his lack of recognition. The main feature and culmination of the exhibition is his latest machine, The Nervous System (Umbilical), from which the show takes its title. This monumental suspended work, spanning over 12 metres, was commissioned by the Museum of Old and New Art in Tasmania, where it will soon be permanently installed in its own bespoke atrium where it will continue weaving forever.





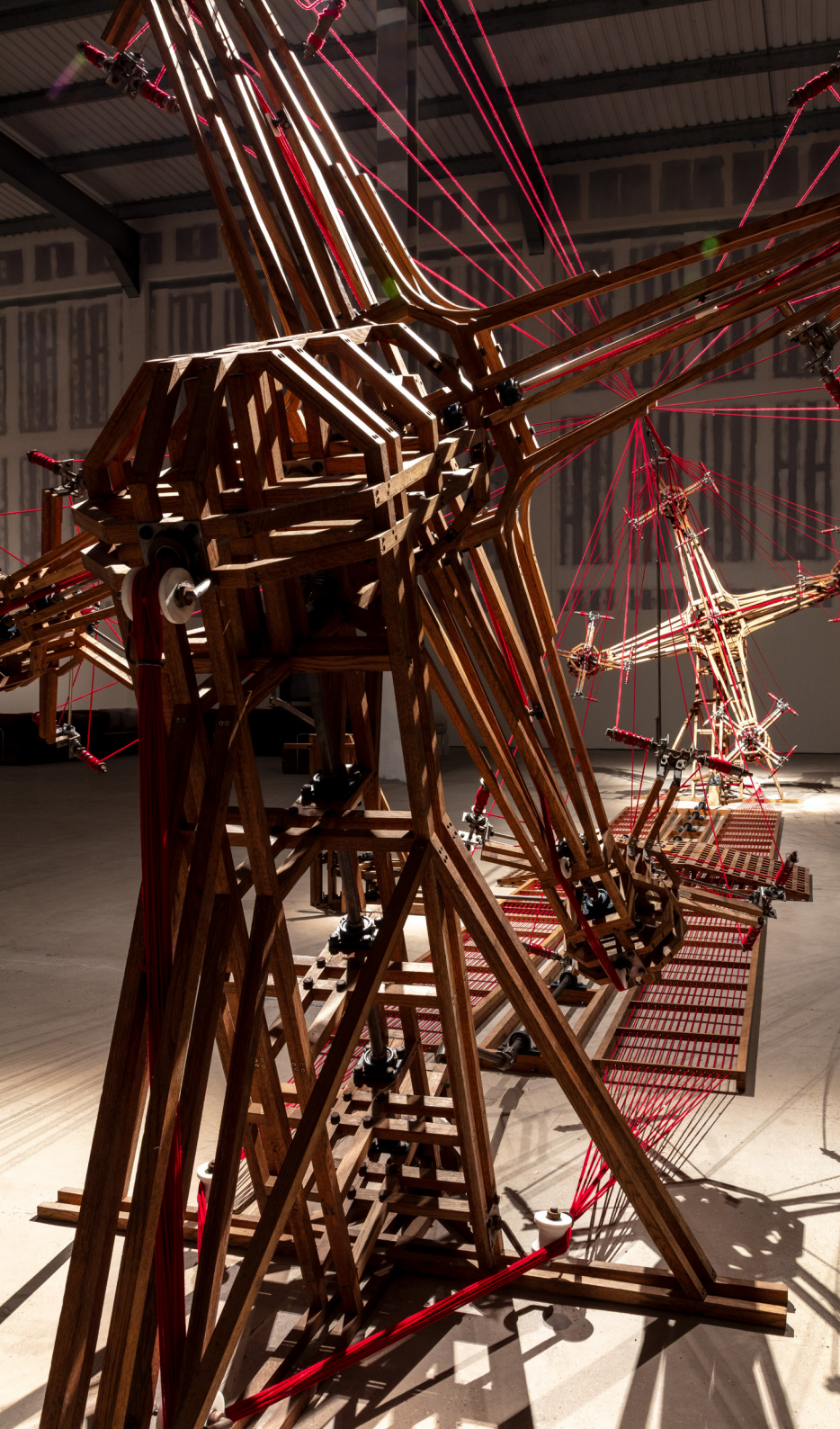
YARN, 2001

Yarn is the very first sculpture in Shawcross' Ropemaker series. The sustainably grown oak, string and mechanical system embody the dominant ways we conceptualise time as both linear and cyclical. The artist was first attracted to rope because it offered him an almost perfect metaphor for the unfolding of time. While the machine looks archaic and appears to be a functional and practical loom, many of its features are derived from planetariums that model the cosmos. These features introduce a sense of ambiguity and contradiction within the design, blurring any clear understanding of its intended purpose and therefore pointing toward broader philosophical and metaphysical ideas.





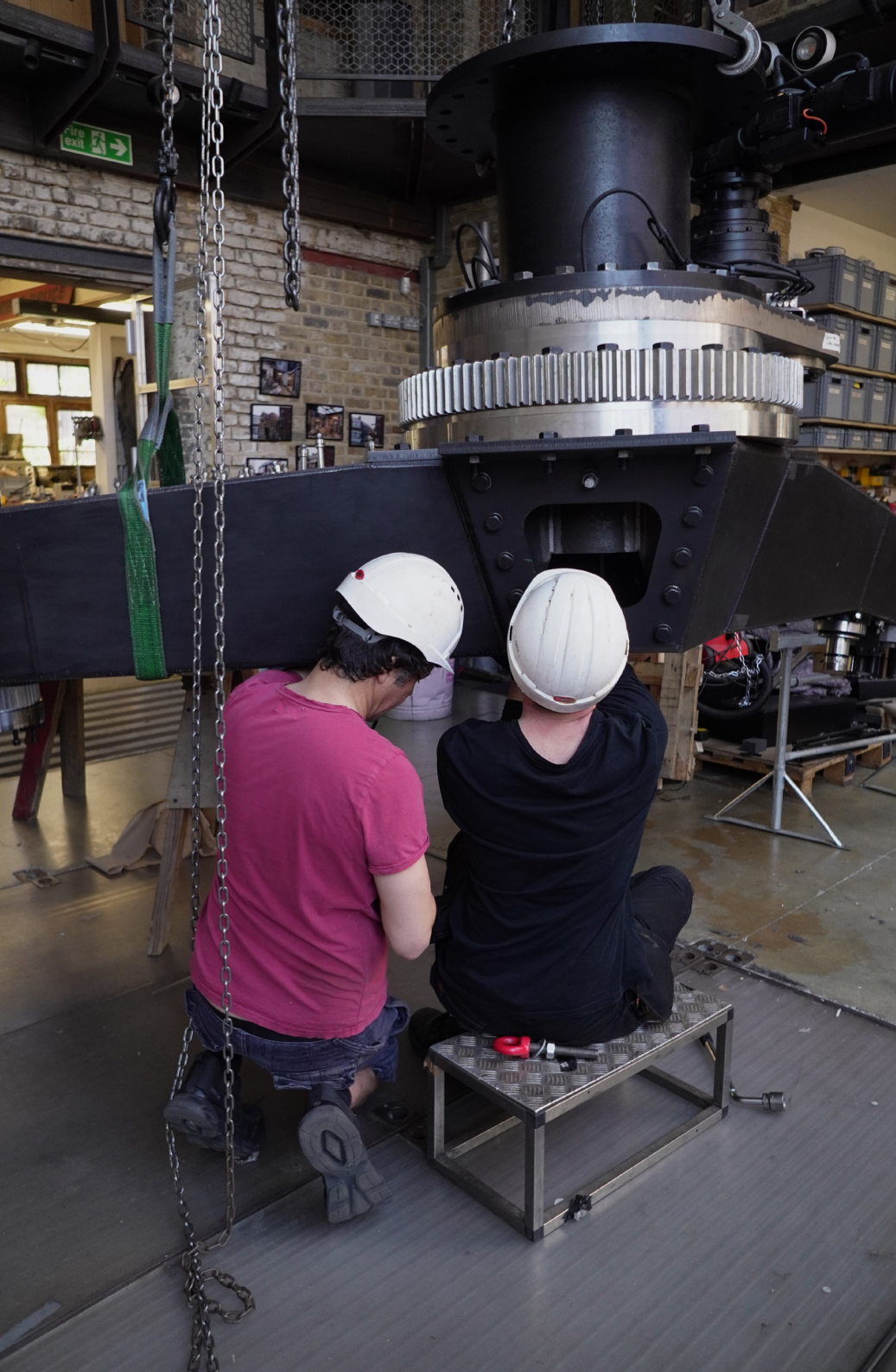
ODE TO THE DIFFERENCE ENGINE, 2006



The title *Ode to the Difference Engine* (2006) pays tribute to Charles Babbage's calculating machine, designed in 1822 but never successfully built during his lifetime. Historians now identify it as the first computer. Had he succeeded, the computer age might have begun a century earlier. In the 1990s, the Science Museum in London, through the exceptional work of Professor Doron Swade, constructed a fully functional machine based on Babbage's original drawings. During a residency at the museum in 2007, Shawcross encountered the machine and began a long standing fascination with Babbage and his loyal assistant Ada Lovelace. The sculpture consists of identical mirrored machines, each rendered in oak and composed of hundreds of delicately carved components, cogs, spools and pulleys. The twin mechanical structures rotate in mirrored opposition one countering and undoing everything the other produces, unraveling the rope as fast as it ravel's it, before feeding the rope back into itself. Although constructed with rational and empirical precision, *Ode to the Difference Engine* was knowingly designed never to function. If left running, it would slowly destroy itself. Its looped system of doing and undoing also refers to *The Odyssey*, specifically Penelope's act of weaving by day and unravelling by night to postpone choosing a suitor, telling them she will decide once her work is finished.



THE NERVOUS SYSTEM (UMBILICAL), 2025



At 10 metres high and spanning 12 metres in diameter, this work is monumental in both scale and complexity. Born of a late night conversation over a decade ago with David Walsh, the visionary behind MONA (Museum of Old and New Art) in Tasmania, the machine's 40 interlocking arms sweep in a sequence of orbits that will never repeat as they continually weave.

Entirely engineered and built in Shawcross's Hackney studio, the work represents an extraordinary synthesis of art and mechanics, speculative thought and scientific rigour. The rotating spools offer a visual analogy to our solar system, reflecting the irregular movements of planets orbiting a sun within a galaxy that is slowly flattening and expanding over time. The rope pulling through the centre evokes the sun's own journey through the galaxy, moving at an incomprehensible speed with its planets and 891 moons trailing in helical paths.



While the machine has a reasonably predictable movement and output, an umbilical cord like rope, the asymmetry within its cycles also renders it truly chaotic, a manifestation of randomness in action. Its fragile and unpredictable mechanics evoke a system perpetually on the verge of collapse. The work prompts associations with the Earth's climate. The more we understand, the more we recognise its vulnerability.

Following the exhibition's closure in November, The Nervous System (Umbilical) will be crated and shipped to Hobart, Tasmania, to be permanently installed in a custom built atrium at the Museum of Old and New Art in 2027. The work will run continuously, stopping only once a year to change its spools. As the years and decades pass, the coiled pile of rope will grow, each moment in history traceable to a specific section. Disturbances in the elliptic plane of the spools will manifest in the rope months later, much like a tornado today may be the result of countless actions from decades or centuries past. The machine provides a clear expression of the delay between cause and effect, action and consequence. As a model, The Nervous System (Umbilical) offers a visual embodiment of past, present and future, and challenges our assumption that the world and our reality are stable.



TIME RULE (UMBILICAL), 2025





UMBILICUS

A Response by Marina Warner

The word ‘umbilical’ comes from Omphalos, ancient Greek for navel, the sign each of us bears that we were once attached to another being, and that this being, our mother, was attached to her mother, and so on back through dizzying time till the beginning. The question arises, did Adam have a navel? Did Eve? According to scripture – the Bible, the Qur’an – the creation of the first humans doesn’t involve gestation inside the maternal womb. Yet artists have never imagined the without this central node that remembers original connectedness.

The omphalos also marked the centre of the body of the earth, which was determined, or so the ancient Greek story goes, when Olympian Zeus, the father of the gods, sent two eagles flying in opposite directions from opposite ends of the world. Where they met, he decided, would determine the centre of the earth, its umbilicus: Delphi. The temple there was dedicated to Apollo, the god of the sun and prophecy, and it drew pilgrims from all over the world to consult the oracle, spoken by the Pythia, from her innermost chamber. The offerings they made took the form of fillets or strings, which they draped on the stone cone that symbolized the Omphalos itself, the navel of the world. Some say the web draped over the Omphalos represents the navel strings - the umbilical cords - of newborns, whose protection was sought from the gods. Germanic and Baltic languages cast the sun as female – Die Sonne, Saule – pouring down energy to assure the flourishing of the earth, just as blood and nutrients flow from the mother’s body through the umbilical cord to the developing foetus. The word umbilicus also carries a memory of its shape – it is related to umbrella, via umbella, Latin for a parasol. The nourishing and vitalizing power of the sun grows life forms that provide shade – protection from excessive exposure. Many species of plants and flowers carry multiple florets radiating from a central stem, like an umbrella. Cow parsley, Queen Anne’s Lace, fennel, carrot, angelica, hemlock - belong to the botanical genus umbelliferae because of their characteristic parasol shape. As with snowflakes, which have inspired earlier work by Conrad Shawcross, every one of these flowers and flower heads is unique, yet they rhyme visually, morphologically.

Shawcross’s Umbilical pulses like a living organism, as each of the spools traces its singular orbit; the whole construction is zygomorphic – asymmetrical. As it rotates and spins, a celestial loom unwinding and winding, to form a protective cover for the cord; the bobbins are feeding it as they gyrate and pour their energy into its growing twisted coils, which bear the marks of time, in dexical runes. The ancient technology of loom, spindle, and bobbin survives in the metaphors we live by: the thread of life, the loom of creation, spinning a yarn, textile/text, even the World Wide Web. When Penelope, waiting and hoping for Odysseus’s safe return from the war in Troy, finds herself besieged by men who want to marry her, she plays for time, promising these unwanted suitors that she will pick one of them when she has finished weaving a shroud for her father-in-law, Odysseus’ father. She weaves by day and unpicks the web by night: a stratagem to make time stand still. Conrad Shawcross’s piece, Yarn, remember Penelope’s web, while his later work, Ode to the Difference Engine, enacts this entropy as it weaves and unweaves a rope.

Behind each of Shawcross’s looms in The Nervous System series, lies the vision of Plato’s spindle from the end of the Republic. A mortal man called Er is allowed a vision of destiny and the afterlife: he sees how the spindle of the goddess Ananke, Necessity, governs the turning of the world and the planets in orbit (the ancients thought the earth and planets revolved round the sun). The goddess is accompanied by the three Fates, the Moirai: Clotho who spins the thread of each individual life; Lachesis, who measures it out and determines its duration; and Atropos, who cuts it at the time of death – her name means no-movement - stillness. Er is given the choice of his next incarnation, he along with all other beings will be reborn in another shape. This concept of time is cyclical: all is change and nothing ever dies; motion is life and it will not cease.