

based Nicholas Mangan: 'Artist Nicholas Mangan masterfully balances a number of complex narratives in his immersive movingimage installations. In his works, micro and macro worldviews spin around one another, creating new forms of knowledge and experience.' It's from the introduction to a catalogue that accompanied Mangan's 2017 exhibition, *Limits to Growth*, at Kunst-Werke Berlin; and it's pretty accurate. Since 2009, Mangan's artwork has largely taken the form of expansive video installations that explore, among other things, subjects such as geology, economics, belief systems, 400 km away from Yap in the islands of Palauan, and were valued

geological processes, mineral values, labour values and humanity's relation to the environment (although that last could equally be rephrased in reverse). And they examine the interconnections between all that. Yet from another

point of view you might say that Mangan's work represents a studied examination of the deconstruction of the art object and the values, auras and mythologies invested in it.

Knowing that the narratives embedded in Mangan's work are complex, you won't be surprised to learn that his recent works rarely comprise anything (other than one coral coffee table) an audience might readily identify as a discrete *objet d'art*. And yet those works are, in many ways, entirely about discrete objects, albeit objects – such as the coral formations of Nauru (in Nauru – Notes from a Cretaceous World, 2009–10), the Rai stone currency of the Western Pacific island of Yap

Here's a typical description of the recent output of Melbourne- 2018, which is inspired by an idea that termite burrowing might be harnessed for use in Australia's goldmining industry and made its debut at the Sutton Gallery in Melbourne, earlier this autumn)-that are not, in the first instance, crafted or produced for the purposes of display as art.

> The subject of Limits to Growth (the artwork) is both the disc-like Rai limestones, which vary in size but can measure up to three metres in diameter and a pretty much immovable tonnage in weight, and the intangible Bitcoin. As Mangan's video tells us, Rai stones were mined

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according to a combination of the lives lost in their production and transport, the status of the chief who had ordered their mining, and the vintage and physical properties of the stone itself. Even Rai stones that were lost at sea main-

tained a value and their ownership was traced through an oral record. Once Yap was 'discovered' and bound into a global system of production and commerce during the late nineteenth century, the Rai (in the first instance by using modern tools and technologies to ease the price of its manufacture and transport and then via the defacement

or destruction of older stones) was used to coerce Yap's indigenous people into labouring in the colonial trade system. The end result was inflation: technology rather than the weather eroded the value of the Rai; trust in its value was destroyed.

The Bitcoin 'cryptocurrency' was founded in the wake of the (Limits to Growth, 2016), or termite architecture (in Termite Ecologies, global financial crisis of 2007–8, on the notion that banks and other





preceding pages Dowiyogo's Ancient Coral Coffee Table, 2010, coral limestone from the island of Nauru, $120 \times 80 \times 45$ cm

ahove Nauru, Notes from a Cretaceous World (still), 2010, нD video, colour, sound, 14 min 50 sec



Limits to Growth (Part 1), 2016, 9 terrahash Bitcoin/Dragon ASIC mining rig installed in the basement boiler-room of Monash University Museum of Art, Melbourne





this and facing page Limits to Growth (Part 2). Numismatics: A Study of Dead and Dying Currencies and the True Value of Waste (stills), 2017, video, colour, sound, 8 min 52 sec guardians of the global economy cannot be trusted to safeguard the value of state-backed or 'fiat' currencies (to prevent what also happened to the Rai). It works on a decentralised peer-to-peer basis and its transactions are numerically encoded. At its inception it was stated that, mirroring a natural resource, Bitcoins would be issued to a finite number of 21 million units. Their release is controlled, dropping by half every four years until all coins are in circulation.

In various iterations of *Limits to Growth* a Bitcoin 'rig' whirrs away to mine that currency, which is then used to fund the printing of largescale photographic images of the Rai stones that Mangan encountered on a visit to Yap. The immaterial currency is used to rematerialise the material currency, in itself a reminder that bitcoins come at a price

(in another currency) of the energy used by computer processors to mine them and by the ventilation systems used to cool the processors (Mangan states that he acquired the rig at a reduced price because its previous owners couldn't maintain a sufficient price-to-value ratio to make Bitcoin extraction viable). One currency loops into another currency and the issue of what that currency materially or effectually 'represents' becomes giddying. Just as Mangan produces a print representing a material currency that has a value in crytpocurrency, that is derived from a fiat currency, but that may or not have any 'real' relation to the cost in energy and materials of the manufacture of the print itself. Let alone the 'intangible' value of the print as an artwork (that may be made tangible by its sale).

In a way, despite the method by which Mangan entertainingly

entangles the history of the Rai and the Bitcoin, *Limits to Growth* is not about the object itself, but about what has been invested in the object (material or immaterial), whether that investment is human or natural, and how we extract value from that investment, be it labour, materials, trust or faith. To which the value we attribute to art as it has transitioned from material to conceptual form might be a corollary: put crudely, the question of market value vs. intellectual, social, historical or cultural value and the ways in which those two measures are established and maintained. In contemporary culture, of course, things like 'cognitive value', 'brand value' and 'design value' have all become forms of rarity over material value, which, despite its finitude, is all too often associated with abundance.

Such issues come to a head in Dowiyogo's Ancient Coral Coffee Table (2009–10, a work that accompanies a bigger video installation, Nauru-Notes from a Cretaceous World), an object carved out of half of one of three limestone coral pinnacles that once stood in the forecourt of Nauru House in Melbourne, the latter a 52-storey monument to the wealth gained by the tiny island state (which once, following independence in 1968, boasted the world's highest GDP per capita) through aggressive

phosphate mining (which produced the

pinnacles). Anticipating the end of

this finite resource, the country used

the money gained from exploiting its

mineral resources to invest in trust

funds and various foreign invest-

ments (Nauru House among them), the

mismanagement of which has now led

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it to virtual bankruptcy. Nauru is infamous today for housing an 800-person refugee detention centre founded in 2001 by the Australian government and an important source of income to Nauruans. But in 2003, as the Nauruan president Bernard Dowiyogo lay dying in Washington D.C., he is said to have proposed an income-generating scheme to transform the coral rock that had been revealed by the phosphate mining into coffee tables to be sold to the us market. A land repurposed and sold as a collection of cultural artefacts (no less finite than the guano from which Nauru's phosphates were extracted) designed to solve the problems of that land. Culture inextricable from global economics; material and immaterial value consistently intertwined.

A cynic, Oscar Wilde famously wrote, is someone who knows the 'price of everything but the value of nothing'. Or someone who

> knows what they spend, but not what they gain and never its immaterial costs. Limits to Growth borrows its title from a 1972 report commissioned by the Club of Rome (which comprises current and former heads of state as well as hereditary rulers and various other politicians and bureaucrats) based on a computer simulation that examined the consequences of increased population and economic growth in the face of the earth's finite supply of raw materials. Its conclusion: that the consequences of business carrying on as usual would be a 'sudden and uncontrollable decline in both population and industrial capacity'. On the one hand, Mangan's narratives suggest that there really is no escape. On the other hand, they suggest that a more complex and nuanced understanding of the world and our place in it may help us to avoid our fate. ar



above Termite Economies, (PHASE 1), 2018, 3D-printed plaster, dirt, synthetic polymer paint, plywood, painted mild steel, fluorescent bay lights, video (looped), four-channel, surround sound, dimensions variable



Prototype for Dowiyogo's Ancient Coral Coffee Table, 2010, coral limestone from the island of Nauru, wooden travel crate, dimensions variable

all images Courtesy the artist; Sutton Gallery, Melbourne; Hopkinson Mossman, Auckland; and Labor, Mexico City