

Ngā
Mahi
Raro-
Whenua

Into
The
Under
World

no. 07 Ngatiawa Street
Maungakiekie [One Tree Hill]

Discovered in 2015.

Original exhibited print
3500mm x 1220mm

Beneath the banality of Auckland's sprawling suburbia, there lies an ancient subterranean world.

Into the Underworld / Ngā Mahi Rarowhenua is a debut exhibition by artist Chirag Jindal in collaboration with speleologists, landowners, iwi, and local councils, and follows 3 years of terrestrial LiDAR mapping of ancient lava caves underneath the city. The exhibition comprises 15 large backlit prints on custom-fabricated lightboxes - measuring up to 7 metres wide and 5 metres tall - as well as a single-channel video installation and a 35-minute ambient score performed and recorded in a lava cave under Three Kings.

The project was initiated to bring the neglected landscape into the public forum, and to digitally archive 11 sites for posterity.

This catalogue contains selected critical texts in review of the work.

An Interest In Collapsed Space

Lynda Simmons

The siting of this exhibition in the Silo 6 Gallery in Tāmaki Makaurau's Wynyard Quarter is perfect, with the Silo's vertical cylindrical tubes of darkness acting as a perpendicular mirror to the horizontal tubes of darkness which are the subject of the exhibition. The sub-suburban finger caves, formed by thrusting molten lava, have no exterior condition due to the layers of earth and surface infrastructure which have blanketed them over time. The concrete silos themselves also offer a complete interior of darkness, entirely separating the urban exterior from the contained shadow within, apart from the singular threshold at the entry point. These works evoke a hidden history of our natural environment - of overlapping histories and layered volcanic fingers - and their placement in an urban setting with an uncanny parallel strengthens their extraordinary beauty.

The drawings themselves describe 'interior darkness' and texture with a sense of lightness and fragility not usually associated with hard materials and cool temperatures. The method of drawing is central to the works - without the conceptual privileging of the interior, without the scanning measurement process, and without the selection of a kind of 'collapsed section', the sensory information

embedded in these sections would differ profoundly.

Because Jindal started this project with the recording of the cave interiors only, this drawing methodology discussion is focussed on these extraordinary natural spaces. To record the cave interiors, typical Cartesian thinking cannot apply, and the use of LiDAR laser scanning technology has enabled point cloud data to be generated from the interior of the 'undefinable' space being measured. The inability to obtain an objective relationship to the space makes these irregular and highly-textured interiors difficult to define using conventional architectural drawing methods. With the absence of an exterior condition, and with the lack of an objective viewpoint as required by Cartesian geometry, the immersive interior is unusually privileged in these (apparently rational) works.

In Jindal's hauntingly beautiful drawings, collected multidimensional scanning data has been collapsed into the conventional architectural language of plans and sections. Rather than produce the expected range of digital models with such highly-accurate and intense spatial data available, Jindal has elected to disturb the familiar, and here the drawing type of the section is of particular interest.

These sections are accurate and recognizable, however they are not the usual conceptual 'cut' through object and space, but a condensed version of the millions of points in space collected through the laser scanning. The result of using such technology to create a section is the fusing of quantified data with qualitative information.

The overlapping of quantitative and qualitative information produces a richness in the sections which is at first difficult to understand, with the familiarity of the Cartesian section as a drawing type being unsettled by the underlying inclusion of sensory conditions - not via colour or light conditions as would typically be employed in an immersive section, but through the very data itself. The intense quantification here creates the qualities in the works, seen especially where the light 'sources' are the locations of the laser equipment positions.

“The method of drawing is central to the works - without the conceptual privileging of the interior, without the scanning measurement process, and without the selection of a kind of 'collapsed section', the sensory information embedded in these sections would differ profoundly.”

The fine 'lineweights', which are effectively clustered points, create textures evocative of knotted, woven and frayed materials, yet we know they are volcanic stone. The lines

themselves are made of light, using it as a material rather than atmosphere. Where the collapsed section is most clearly illustrated is in the lack of a singular cut edge where stone meets space, instead the layering of points and lines describes both spatial depth and movement, quite possibly evoking the historical slow crawl of cooling lava.

The use of current technology to explore the essential nature of a section's subject calls to mind the contribution of previous technologies such as photography to architectural drawing, via the sciences and arts.

In her paper 'Seeing in Section: the Practice of Photogrammatic Drawing',² Shelley Martin discusses how a section can be conceived of and made as a drawing of collapsed space (my terminology), with embedded depth, rather than as a measured slice. To illustrate this idea, she presented a series of Virginia Tech student works created in the dark room using their own previously made models. The resulting photogrammic³ imprint captured not only the accurate measurements of the contact side of the model and the section as a slice as per a knife, but also the condensed space of the depth of the model itself. This illustrates the inclusion of qualitative spatial information inherent in the model.

The history of photograms shows their use in both the sciences and fine arts, with an initial interest in the post-Enlightenment recording of the natural world. The first book with photographic images was by English Botanist Anna Atkins in 1843, *British Algae: Cyanotype Impressions*.⁴ In the fine arts, the photogram technique was used most widely in the early Twentieth Century, by

artists such as Man Ray, Lee Miller and L. Moholy-Nagy, among others. In Jindal's works, both the sciences and the arts interweave in these simultaneously quantitative and qualitative drawings, and despite the differences in era and technology, there is a pleasant similarity to Atkins' 1843 coral cyanotypes. Martin suggests that "...the photogram is a materially productive tool that registers, activates and transforms both material and phenomenon."⁵ I would argue that Jindal, too, uses a highly sophisticated version of data technology to achieve precisely this.

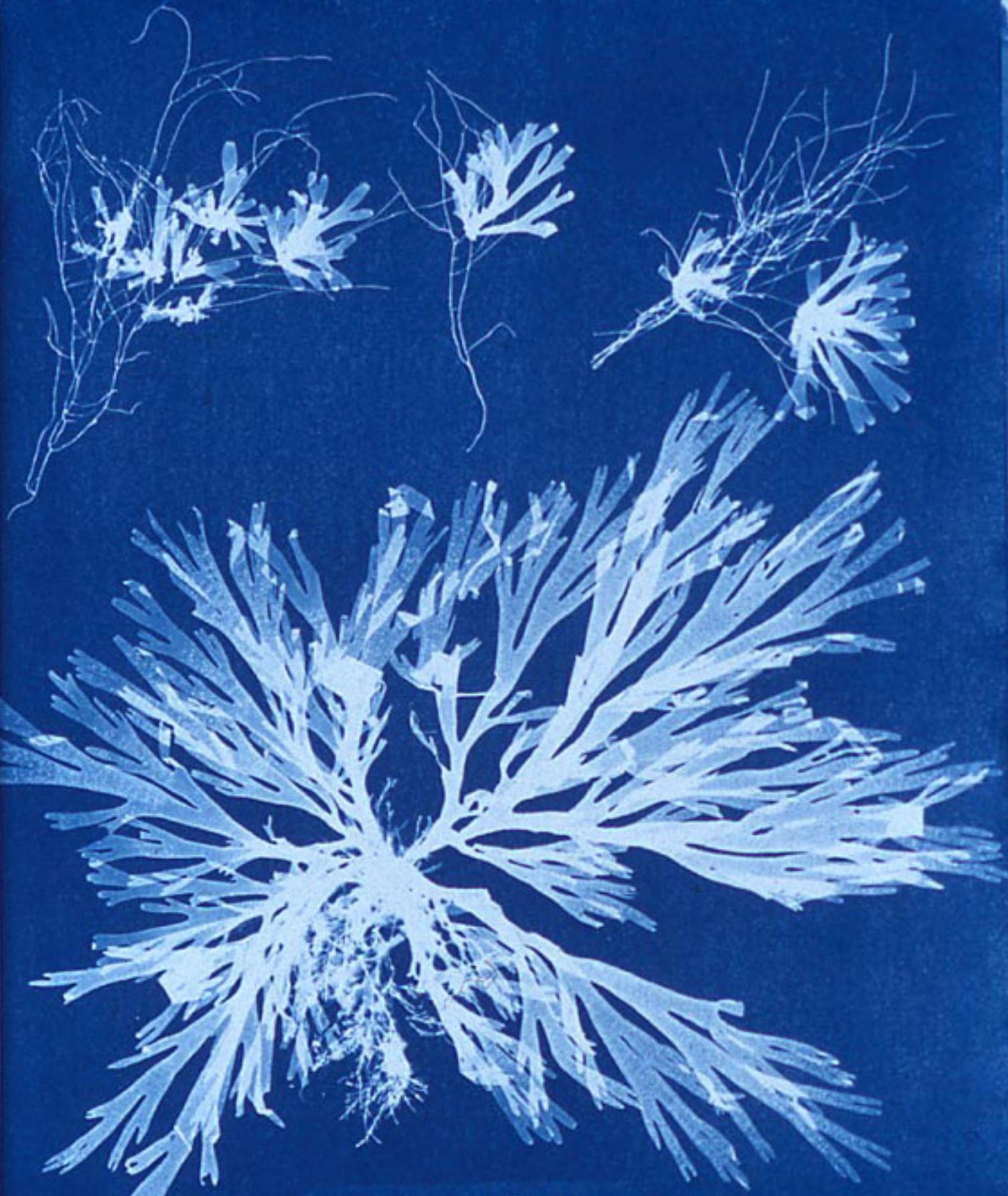
The method of making these images has an impact on the viewers' understanding of the underworld spaces depicted. One that most of us may never visit. Tāmaki Makaurau's underworld is here beautifully described through being generated literally from within, increasing the sense of power lying beneath the thin suburban layer of most locals' daily lives. Jindal has drawn upon mythology and its relationship to darkness and the underworld, in particular the Maori concept of Te Kore, often described as ultimate darkness and pure potential.⁶

To contrast this power, the same method of data collection and image-making has been used in the measuring, drawing and archiving of the surface infrastructure. This gives familiar objects of our daily lives – weatherboard houses, roads and cars – an ephemeral feel. To increase this sense of uncanny, the immediate juxtaposition of these two worlds reminds the viewer of the inescapable reality of rational, measured space – the closeness depicted here seems impossible. Rarohenga, governed by Hine-nui-te-po, in our minds is distant and unreachable in this life.

The works in this exhibition, and its predecessor in December 2017, have grown from Jindal's post-graduate thesis carried out at The University of Auckland in 2015, called *Into The Underworld: The Architecture of Katabasis* (2015, Supervisor

Jeremy Treadwell). Jindal's body of work is an excellent example of the importance of the research-by-design thesis year at the conclusion of five years of architectural study. Chirag Jindal's thesis has extended beyond the academic world and become a conflation of art, technology, architecture and business in his practising life.

1. Jindal, Chirag, *Into The Underworld: The Architecture of Katabasis*, March (Prof) Thesis, The University of Auckland, 2015. (Supervisor Jeremy Treadwell)
2. Shelley F Martin *Interstices 11*, Enigma; He Aupiki, Auckland 2010
3. Often called a photogenic drawing, with origins in the 1830s in England by W. Talbot and predated Daguerreotypes. Cyanotypes are another type of photogenic drawing, known commonly as Blueprints, and followed in the early 1840s, understood to be first used by Sir John Herschel.
4. Ed. Hannavy, John, *Encyclopedia of Nineteenth-Century Photography*, Taylor & Francis Ltd, 2007
5. Shelley F Martin *Interstices 11*, Enigma; He Aupiki, Auckland 2010, P161
6. Ranginui Walker, *Ka Whawhai Tonu Matou: Struggle Without End*, Penguin Books Auckland 1990, p11.



Dictyota dichotoma
in the young state, &
in fruit.