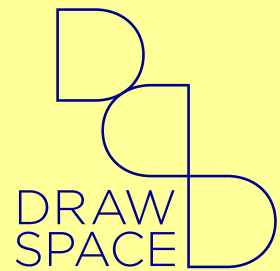


DRAW Space acknowledge the Gadigal people of the Eora Nation upon whose ancestral lands our ARI now stands. We pay respect to the Elders past, present and emerging, acknowledging them as the traditional custodians of knowledge for these places.

Group Show / GRAPHITE

6pm Thursday 4 April to 5pm Sunday 28 April

Curated by Belinda Yee



An non-profit, artist-run platform to make, see and experience contemporary drawing.

Exhibition Essay

Graphite - A Sketchy Outline, by Gary Warner

Graphite is an idiosyncratic form of crystalline carbon found naturally on Earth in three primary forms - amorphous (aka cryptocrystalline), natural flake and crystalline vein. It develops mostly from carboniferous deposits such as anthracite coal - the fossil remains of unimaginably ancient plants - metamorphosed under geological conditions of extreme pressure and heat. It is also one of the oldest minerals of the Universe; microscopic grains of graphite retrieved from space predate the formation of our solar system.

Artists and makers have used graphite since the Palaeolithic era, the dawn of human time. A Neolithic carved graphite pendant was found in Poland in 2014. Pottery sherds found in archaeological digs on different continents demonstrate independently developed uses of graphite for marking designs on surfaces and as inclusion in shaping clay to improve the thermal insulation of vessels used for cooking or crucible metallurgy. Industrial crucibles still include graphite for its thermal properties.

The largest known natural source of terrestrial graphite was revealed in England at rural Borrowdale in the mid-16th century. Herders found the slippery stone useful for marking their sheep. Pre-industrial military inventors found a different use as a slippery liner for cannonball moulds. Easier release from graphite-slipped moulds yielded improved spherical cast-iron shot that could travel further on better-aimed trajectories, an empire-building advantage for the British Navy.

Naturally, the Crown monopolised production from the Borrowdale site and ruthlessly controlled the supply of this miracle mineral. A British embargo on the export of graphite to France during the Napoleonic wars prompted Nicholas-Jacques Conte, a scientist serving in Napoleon's army, to stretch limited graphite supplies further by mixing it with clay to make the first pencils.

For a few centuries, there was excited conjecture amongst Natural Philosophers as to what precisely this unusual mineral comprised. Was it a form of lead, like the Romans used for writing and marking? For centuries, the name plumbago, meaning 'lead ore', was graphite's name in the Dutch colonial Ceylonese (Sri Lanka) mines where the purest crystalline graphite was extracted. In 1779 Swedish chemist K.W. Scheele proved the mineral was a form of carbon. A decade later, German mineralogist Abraham Werner coined the term graphite from the Ancient Greek for 'to write or draw'.

Since the late 19th century, graphite has been synthesised using a series of ever-evolving industrial and chemical processes. Today, in addition to the common pencil, which utilises low-quality graphite mixed with clay (14 billion made worldwide each year), high-purity graphite - natural and synthetic - is vital in a dizzying variety of technological uses, including the manufacture of steel, for encasing uranium in nuclear reactors, for lubrication of mining machinery, in gunpowder to stop the build-up of static charge, and for the production of efficient batteries. A typical EV lithium-ion battery contains approximately 40kg of graphite.

31A Enmore Road
Newtown 2042
PO Box 352
Newtown NSW 2042
info@drawspace.org
www.drawspace.org

Late 20th-century consumer demand for portable electronics, such as CD players, video cameras and power tools, prompted the invention of small rechargeable batteries. Laptops, mobile phones, tablets and smart phones drive demand for ever smaller, more powerful, long-lasting batteries. Innovations with graphite have been central to the imposing ubiquity of these technologies.

In Australia, graphite was noticed in the mid-19th century by land-clearing colonial settlers in South Australia's Eyre Peninsula. Records indicate a small mining operation exported a few tons of graphite to London in 1866, but there was little further activity until the 20th century when Uley became the site of three successive graphite mining and processing ventures, the first commencing in 1907, the third closing in 1993. Each began with optimistic speculation but soon ended in fiscal failure. Today, with the speculation of fantastic wealth generation believed for the developing graphene industry, the graphite deposits of Uley are again being extracted. Graphene is a one-atom-thick layer of graphite. One atom! It is the strongest known substance on Earth and superconductive – a characteristic that makes it invaluable to innovations in computing technologies.

In the 21st century, as applications of the hyper-tech material graphene excite markets and scientists alike, earthy mineral graphite sustains innumerable multifarious industrial and scientific uses but also remains a material of fascination and locus of perpetual inventiveness for contemporary artists. Over in the creative space of expanded drawing, I will conclude with brief descriptions of three inspiring uses of graphite I've witnessed.

Matthew Barney – In November 2014, at the Museum of Old and New Art in Nipaluna/Hobart, US artist Matthew Barney invited members of a local women's AFL team to enact Drawing Restraint number 21 in his longstanding, ongoing series. The team deployed their collective strength to drag a 2286 kg block of graphite along the walls of the space that would present Barney's epic *River of Fundament* exhibition at MoNA in 2015. The immense block sat heavily on a wooden sled, redolent of those used in Dynastic Era Egypt to transport monoliths for mastaba and pyramid construction.

The deliberate and difficult action, performed after opening hours, created dense dark marks and deep gouges in the walls to circumscribe the white cube with a memory scar, an architectural distress in conversation with the imposing, abject and fabulous sculptural forms populating the gallery.

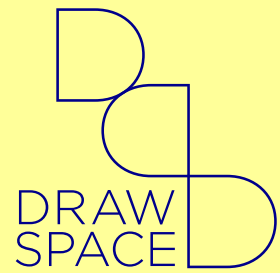
In an earlier Drawing Restraint action (#19), Barney designed a skateboard with a large, shaped graphite form fixed underneath the leading edge. The artist's condition for donating the board (it was later auctioned) to a skate park project in a neglected Detroit neighbourhood was that it be ridden, to make drawings. Champion elder artist-skater Lance Mountain obliged, tearing around the park's banks, bumps, and bowls to leave incidental drawn traces of his energy, exertion, skill, and thrill.

Emma McNally – UK artist Emma McNally creates what she describes as 'humming graphite sound fields' and 'weather systems of graphite'. In 2014, she was commissioned by Stephanie Rosenthal, curator of the 2016 20th Biennale of Sydney, to create work for exhibition on Wareamah/ Cockatoo Island in Sydney Harbour at the confluence of the Parramatta and Lane Cove rivers.

Working exclusively with various forms of artist's graphite – pencil, stick, powder, water-soluble – and erasers, she produced 12 drawings collectively titled 'Choral Fields'. Significant works on paper, each approximately 2m x 3m, they were displayed on the open-plan top floor of one of the many buildings of the defunct ship-building site.

Each drawing was presented in a free-standing timber frame painted white. The series was installed as a perimeter procession lining a purpose-built zig-zag platform with a wide entry and a sharp-pointed terminus. The viewer took a small ceremonial step up onto the grey-painted platform to walk around and along the angled shape, looking at the large panels in sequence.

Moving close to a drawing revealed an extraordinary range of marks, lines, traces, and paths suggestive of circuitry, telecommunications, code, molecules, stars, shoals, electronic pulses, particles and networks, defined within vast swirling clouds of smudge, erasures and rubbing. At the pointy end, the viewer became wedged between two of the large drawings, their peripheral vision enveloped in the lustrous surface remains of the artist's skill, intention and long labours.



An non-profit, artist-run platform to make, see and experience contemporary drawing.

Joyce Hinterding – Australian artist Joyce Hinterding explores and exploits another of graphite's many curious characteristics—it can act as both an electrical conductor and an insulator or resistor. In her remarkable works, she shifts drawing beyond image and representation into a realm of revelatory function.

In the 1990s, Joyce wondered what would happen if she made a graphite drawing of an electronic circuit diagram – would it 'work' as an electronic component? On paper, she made a graphite and silver leaf drawing of a phase-shift oscillator and discovered the answer was yes. Evidence was provided through sound.

Since then, Joyce has continued to create and develop a remarkable series of energy-scavenging graphite 'Induction Drawings'. One type in the series operates as an antenna that discloses the presence of invisible anthropogenic electromagnetic energies we are constantly immersed in. Joyce's exquisite antenna drawings travel the world. Visitors are encouraged to touch them while listening to their amplified sonic register. A finger touch changes the electrical flow, altering the sound. Joyce once told me she only considered a drawing finished once it had returned from its travels, smudged by the investigative gestures of innumerable curious bodies.

Ode to a Slippery Shape-Shifter

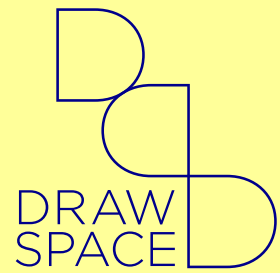
Curator's note by Belinda Yee

Graphite can be a tricky medium because its slippery surface makes it difficult for other media to adhere to. Despite this complication, graphite has an undeniable charm. In powdered form it has a soft, luxurious quality and is perfectly suited to creating atmospheric tones that appear to float just off the drawing surface. As a liquid, graphite flows in diluted tones across paper and fabric, whether painted, dripped, poured or wicked. In solid stick or pencil form, it can be hard and precise, maintaining sharp edges where other media, like charcoal or pastel, would smudge and crumble. Graphite's shale-like structure also allows it to catch and reflect light, appearing stunningly bright under oblique or raking light. One of its most intriguing characteristics however, is that graphite never sets or hardens; it remains unstable, ever-changing, and in flux. As an art form, drawing is often characterised by its mutability, a characteristic derived from drawing media like graphite, which remains changeable.

Graphite is ubiquitous in the form of lead pencils (despite the misnomer, as they are not made of lead). Pencils are democratic and accessible, easy to use and readily at hand. In this form, graphite serves as the medium through which thoughts are often expressed – a quick sketch, a shopping list, a hastily drawn map, meticulous notations or schematic diagrams. Fast communication, so central to graphite's uses, underpins its nomenclature as the Greek word 'graphein' from which graphite is derived, means 'to write'. Graphite is the perfect tool for thinking on the page and externalising thought. The circular, haptic thinking that occurs between eye-mind-hand and plays out through cycles of doing and undoing, thinking and rethinking, is ably facilitated by graphite's ready accessibility and the ease with which it is erased. Graphite is a versatile and beautiful material, and its shape-shifting character enables it to do different things for different people.

DRAW Space gallery is the ideal platform for showcasing graphite, a medium fundamental to contemporary drawing practice and an ancient material that continues to drive new and innovative thinking and processes. As the curator of GRAPHITE, I found the artists and their work recommended themselves almost simultaneously to the idea for the exhibition being hatched. Such is the diversity of uses and the extraordinary graphite based work produced in contemporary Australian drawing.

In **Joyce Hinterding's** work, for example, she gives voice to the invisible electromagnetic energies swirling around us. For this exhibition, she has created a large graphite drawing inside the gallery window. Graphite's conductivity means the drawing is a simple loop antenna that exchanges electromagnetic energy with visitors as they touch the glass. Interaction with the work changes the volume of sounds accessible through the headsets provided. Hinterding describes the work as "street drawing (graffiti) meets 17th-century mathematics to produce a baroque-looking and fractal induction antenna. The outer line is a single loop antenna, and the inner lines are passive resonators acting as graphic amplifiers." In this way, Hinterding's work uses an ancient medium to foreground the instantaneity of electromagnetic interaction and the omnipresence of the energy fields around us.



An non-profit, artist-run platform to make, see and experience contemporary drawing.

Armando Chant and collaborators **Chris Casali and Graziela Guardino** combine liquid graphite with fabric to create beautiful, delicate works. Armando's work, *Diptych II (Vallée de Vénéon)* (2023), is sensitive and atmospheric, a quality he creates through layering graphite washes over embroidered canvas and through layering graphite, beeswax and varnish over photographic prints. His work holds in tension the sensation of knowing and not knowing a landscape, of being immersed in an image while simultaneously aware of its painterly surface. In contrast to Armando's stretched canvas, Chris and Graziela have created a free-form, hanging silk structure in *Evanesce* (2024). They are similarly interested in pulling at the memory of landscape but are more directly concerned with the state of the planet. Where the artists have carefully removed threads, they have destabilised the structure of the work, mirroring the stripping of natural resources from the environment. Armando's, Chris and Grazielas' works celebrate the way liquid graphite flows to create subtle, buildable tones and fluid forms.

Matthew Allen's work *Untitled* (2023) is a mirror-like surface that creates blurred, shifting reflections of its surrounds. The process of making these graphite-mirror works is time consuming and physical, it involves polishing a marble-like substrate followed by layers of graphite. The resultant surface is a luscious, amorphous plane. But it is also unfixed, imparting the sense of something equally precious and precarious. In its perfection, the polished graphite-mirror sits like a threshold between here and somewhere dark and unknown.

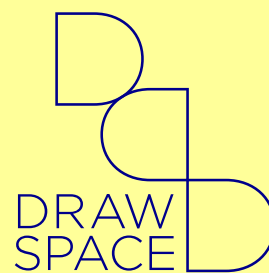
Katelyn Geard uses powdered graphite to create delicate, sensitively drawn figures. These are the only figurative works in the exhibition and bring attention to drawing's most instinctual use – as a tool to reflect what is around us, what we see and who we are. In *I have something to say* (2024), Katelyn uses powdered graphite and brushes to feel for form. The medium allows layers to build, and brushes make for soft, ethereal marks. Katelyn's drawings look like drawn memories; in the amorphous textures, there is an acknowledgement of time passing; the forms are not solid or certain, not locked to the present, but appear to be passing through.

Annelies Jahn also responds to the world around her but through a more measured, conceptual, non-objective approach. In GRAPHITE, Annelies presents mapping works made with and of, graphite stick. It feels in these drawings like Annelies is 'working things out,' mapping the world systematically, as a way of understanding it, thinking it through, intuiting it. The work has two parts: a drawing on velum, *DRAWN INTO FORM* (2024), and a small, three-dimensional sculpture, *CITE STUDIO FORM* (2019). The former foregrounds graphite's ability to reflect light depending on the angle at which it has been applied. The sculpture transposes the drawing into three dimensions, highlighting graphite's soft, carve-able materiality.

Fiona Currey Billyard spent her early years in Papua New Guinea but grew up in Australia where she later studied archaeology. Her work examines the removal of meaning and power that occurs when objects are taken from their original people, cultures and locations as an outcome of colonisation. In GRAPHITE, Fiona presents a small fibre-based work covered in graphite, a knotted and crocheted object that trails off into long fibre strands. Fiona painted this work with a mixture of graphite, medium and her mother's hair before smoking the object with her father's tobacco. These personal ephemera are items of substance and memory for the artist, which hold a kind of puri puri (magic) and add a sense of beauty and abject discomfort. For Fiona, using graphite is a means of "giving a soft object a hardness and metallic look ... giving the object a hidden quality, a kind of materialistic puri puri."

Belinda Yee works with time as a medium. She is attracted to the temporal paradox inherent to graphite – that it takes millennia to metamorphose in nature but can be used and erased in a second. In this exhibition, Belinda reflects on graphite's transient nature by presenting several one-second drawings. In her practice, Belinda is interested in decolonising time, which she attempts to do by foregrounding temporalities other than the quantified, measured and structured metre of industrialised time – preferring to foreground time as lived units of experience or change.

Through the work of nine contemporary Australian artists, the exhibition GRAPHITE seeks to explore the breadth of the medium's material potential. It demonstrates the many ways graphite is used in contemporary Australian drawing, revealing a diverse wealth of engagement with this sometimes tricky, many-faceted material.



An non-profit, artist-run platform to make, see and experience contemporary drawing.