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The cloud is evasive. Ephemeral and ever shifting, the cloud can disperse as quickly as it gathers. The captured cloud must be proven through data: classification, motion tracking, meteorological survey, photography. By the time it can be analysed, its trace may be invisible. In this way, the cloud can become weaponised when it is not witnessed.

For Forensic Architecture, whose investigative model is predicated on the notion that every contact leaves a trace, clouds challenge the forensic methods of capture and analysis. They test the limits of proof, described by the agency’s founder Eyal Weizman as the threshold of detectability: things that hover between being identifiable and not.¹

The grain of an analogue photograph or the pixel of a digital image at a certain scale renders the exact object of interest – a person or a feature of a building – indistinguishable from its surrounds, concealing them within the image. As clouds disperse into the atmosphere, their trace may only be found in poisoned crops, in the trauma of survivors and or in the slow decline of eco-systems.

In *Forensis: The Architecture of Public Truth*, Weizman defines the concept of field causality to describe the multiple factors that affect a site of investigation;

> **Field causality is a useful frame for describing forms of violence that are not ruptural, but rather slow and continuous, without clear beginnings or ends-those which might be considered to constitute an endless war defined by the permanent clash of multiple forces.**²

As a subject, clouds exemplify the blurred boundaries of field causality, shifting the relationship between data points from linear to relational.

The investigations in *Cloud Studies* span twelve years, four continents and varied atmospheres in between. Their field causalities reveal the pervasiveness of state violence, the porousness of global borders and the corruptibility of the air. In Sydney, where our air has been compromised since the beginning of the last bushfire season (and, arguably, before that), toxic clouds have already reshaped how we move through public spaces.

The responses collected in this publication constitute a new cloud atlas, bringing localised perspectives and distinct contexts to Forensic Architecture’s investigations. Just as Forensic Architecture draw on the cross-disciplinary tools of their colleagues, the writers chosen for this volume come from varied disciplines and through them new lines of enquiry emerge.
For all their ephemerality, clouds can be the most stable object on the horizon. In the 2017 investigation The Seizure of the Iuventa, Forensic Architecture used the position of cloud formations to dispute an accusation by the Italian judiciary that the NGO-operated ship Iuventa was colluding with people smugglers. Analysing video shot during a mission to rescue migrants in the Mediterranean, Forensic Architecture used the position of the clouds as the most fixed object in a visual field without terrestrial reference points. Using motion tracking technology, they created a hemispheric radar image and placed the events on a verifiable chronology.

Clouds evoke the limits of human knowledge, as Tom Melick reminds us in this publication, explaining their use in the history of painting as expressions of “fiction whirling into fact, moods externalised, where weather and myth meet, and messages of all kind are sought, conjured, ignored and lost”.

But clouds can conceal as much as they illuminate. In his essay in this publication, Joel Spring considers the smoke from burning lime kilns in colonial era Sydney; situating the built environment of Sydney as a testament to the erasure of Indigenous sovereignty. The first cement rendered by colonisers was made from crushed and burned middens of oyster shells on the site where the Sydney Opera House now stands. The colonisers called this place Limeburners Point, overwriting the Gadigal place name Tubowgule – meaning ‘where the knowledge waters meet’.

And clouds can herald a message or derail its intent. In the 2012 investigation The Use of White Phosphorus in Urban Environments, Forensic Architecture were commissioned by the group Yesh-Gvul to demonstrate how the Israeli military’s use of white phosphorus in Gaza was indiscriminate in its deployment in civilian areas. Israel denied the use of white phosphorus in urban areas, but when news footage and photographs of the distinctive tentacled clouds emerged in the media, the military claimed that its use was as a ‘smokescreen’ for troop movement. They discontinued its use following court proceedings, with newspapers citing a general’s statement that, “white phosphorus doesn’t photograph well”.

In urban environments, the deployment of chemical weapons creates two clouds – the literal cloud which can be measured and experienced, and a cloud of images and documentation created by the people targeted. In their 2014 investigation The Bombing of Rafah, Forensic Architecture collected hundreds of images and videos uploaded by civilians to social media in order to compare the shapes of smoke plumes. This allowed them to create a 3D model of the event, locating the exact munitions used in the attack. Amnesty International later identified this attack as a war crime. The investigations Triple-Chaser (2019) and Model Zoo (2020) used a bank of images scraped from social media to create photorealistic environments in which machine learning classifiers were trained to track the use of tear gas against civilians: synthetic images to trace synthetic clouds.

Field causality blurs the boundaries between injustices, highlighting existing inequities as new ones emerge. In her essay in this publication, Thalia Anthony notes the well-documented use of tear gas against children in youth detention in Australia, the vast majority of which are Indigenous. Further, the relational nature of field causality, involving “the spatial arrangement of simultaneous sites, actions, and causes,” allows for cross-border solidarity. “A pandemic offers us some insight into life on Gaza time,” states Micaela Sahhar in her essay – one calamity providing a new lens on another in different time signatures and hemispheres. In his text, Jason de Santolo finds fortitude and lines...
of shared resistance between the Mapuche in Forensic Architecture’s investigation *Oil and Gas Pollution in Vaca Muerta* and Gudanji, Yanyuwa, Garrwa and Mara Elders protesting against the McArthur River Mine in the Northern Territory.

In their granular specificity – down to the scale of pixels and microseconds – Forensic Architecture’s investigative practices reveal our larger conflicts, spanning hemispheres and cultures. The cloud stands in for the whole, a synecdoche of violence on a grand scale. Together, the investigations in *Cloud Studies* demonstrate that the nebulous quality of clouds – veiled and shifting – is fitting for the multi-causal violence of our moment. The cloud evidences the past and is a portent of things to come. □

Eleanor Zeichner is Assistant Curator, UTS Gallery & Art Collection.

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Endnotes

The history of architecture in so-called Australia, or at least a part of this history in the south eastern coast, is a history of cement, or more specifically CaO. CaO, also known as lime or ‘quick lime’, is the result of a process of simple lime burning of limestone or other calcium rich substances such as shell and coral. When put under high heat, compounds made of calcium carbonate (CaCO₃) break down into calcium oxide (CaO) and carbon dioxide (CO₂) that rises into the air as clouds of smoke, leaving behind ashy powder lime. CaO when mixed with water forms calcium hydroxide, or hydrated lime Ca(OH)₂ which in composite with sand creates mortar. As mortar dries it reforms into calcium oxide (CaO) absorbing carbon dioxide from the air to form calcium carbonate (CaCO₃) returning to a solid state and completing the cycle.

Cement mortar is used in the construction of masonry structures, including the composition of the bricks themselves in some cases. It is also the binding agent in concrete, which is the most ubiquitous building material in the world today.

In the context of the place we now know as Sydney, this cycle operates at another scale, when we think specifically about where the lime came from and where it went.

We all understand that people lived (and prospered) here before the arrival of the first fleet and the formation of the towns and cities we now inhabit. We all understand that these peoples had their lands, livelihoods and even lives, stolen -wrongfully and unlawfully as agreed by the Australian High Court in Mabo v Queensland in 1992. When you walk

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“There is no immediate ontological division between construction and destruction, we’re speaking about the political plastic as a category, includes both constructions and destruction. It is really the way in which political forces slow into form... It is simply the reorganisation of matter across the surface.”

Eyal Weizman¹

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¹ Eyal Weizman, Unbalanced Formula(tions) (Birkhäuser, 2009).
through the city what do you see? How is that perspective different to that of an Indigenous Australian’s view of the same urban landscape? This is a subjectivity continually marked as out of place, deviant or inauthentic in our cities.²

The British colonists invading Botany Bay in 1788 brought minimal to no building materials,³ anticipating limestone to be readily available along with other mineral resources. In the meantime, manicured forests along the coastline were felled for timber structures and the Sydney Cove landscape was denuded of useful timber. The settlers built improvised slab huts and early masonry structures but, being bereft of lime mortar, they did not stand up to the climatic and ecological tests of these storied landscapes.

Despite this, colonial settlement persisted and through these insurgent moves the colonists set upon the bountiful, though unrefined, stores of calcium carbonate (CaCO₃) that lined the coasts and estuaries of so-called Sydney. These were the massive shell structures, colloquially known as middens, although to describe them as such limits the scope of their true intent. Quandamooka artist Megan Cope references the stories of middens on her country in her 2019 work titled RE FORMATION, describes them as ‘monumental form(s) in the landscape, a 22,000 year old shell pile as high as a building.’⁴ These shell structures contained within them complex systems of that signified climatic and temporal information about a specific place and given their sustained presence in the landscape represent sites of cultural significance to Indigenous people such as ceremonial and burial sites. This redefines the colonial extractive practice as an exhumation. That the colonists described these structures as ‘kitchen middens’ or ‘discarded refuse’⁵, reveals the apparent fungibility the colony afforded the ‘colonial other’ through classification and naming.

‘we (white geology) recognise geologic material practices (oil and mineral extraction) as explicitly tied up in the realm of the political, the declared innocence of acts of description and their historical inscriptions on bodies and geographies are left unexamined.’⁶

The reading of features in this landscape by settlers as matter and material lead to this exploitation and destruction of vast networks of middens and manicured forest. Lime heap burning was materially intensive, given the high amounts of fuel necessary to burn in the open. But every builder in old Sydney town obtained building lime from the region’s approximately 200 shell lime kilns.⁷

Contemporaneous to these processes undertaken by settler invaders on this country, the discipline of geology - which precedes palaeontology and anthropology as a distinct academic discipline - was undergoing a shift. Geology moved from a practice for determining localised strata for commercial purposes of extraction to a temporal practice for determining the status of bodies in time and theories of the earth.⁸

The lineages and limitations of geological thought are an epistemological base by which racial difference is consolidated in this country. I mean this both in the historical context of settler colonialism and in our contemporary articulations of the erasure of Indigenous cultures and narratives.
We can begin to picture this moment, not only as a scenario of apocalyptic violence against those peoples whose languages, cultures and meanings predate and endure colonial settlement. But also, this was the moment in which the structure of one world was literally transformed into another. Picture Sydney Cove awash in clouds of smoke as a multigenerational network of sites that carried cultural, geographic and climatic meanings built through millennia, were burned.

The foundational actions of settler-colonialism was conditional upon the elimination of indigenous practices.9

These smoke clouds contain more than their chemical composition. The limits of what is possible to see, know and speak have continued to transform through 234 years. To reflect on the sheer scale of what is lost, the silence created in its absence.

Joel Spring is a Wiradjuri Masters of Architecture student and interdisciplinary artist currently focussing on the contested narratives of Sydney’s and so called Australia’s urban cultures and indigenous history in the face of ongoing colonisation.

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Endnotes
Tear gas has been repeatedly deployed to put down dissent by Aboriginal children in Northern Territory (NT) youth prisons. The racist criminal justice stance in the NT means that almost all children locked up are Aboriginal. 1 Aboriginal children’s dissent in detention stems from an oppressive environment in which they are subjected to prolonged segregation, physical violence, degrading treatment, excessive use of restraints, hooding, forcible strip searching, racist remarks and run-down facilities in what were previously adult prisons. Rather than decarcerate Aboriginal children2 or fix these conditions, the NT Government has backed the NT Police Territory Response Group’s use of tear gas. On numerous occasions, the police and the government has justified tear gassing children at Don Dale Youth Detention Centre in Darwin on the grounds that the children present a risk to staff and property.

The use of tear gas featured on the national broadcast of conditions in Don Dale on ‘Australia’s Shame’, a Four Corners program in July, 2016. It was also examined and condemned by the consequent Royal Commission into the Protection and Detention of Children in the NT (2016-17). The Royal Commission received extensive evidence on the use of tear gas in 2014 and its adverse and ongoing effects for the Aboriginal children who were exposed, including blindness and respiratory illness. Without any redress or remorse from the NT Government for this harm, the Aboriginal children brought a civil claim off their own backs seeking damages. In 2020, the High Court of Australia ruled that the use of tear gas in youth detention is unlawful in the case of Binsaris & Ors v Northern Territory [2020] HCA 22.

The events leading up to the deployment of tear gas in 2014 involved the indefinite segregation of a 14-year-old boy, known by the pseudonym AD. The segregation unit at Don Dale is called the Behavioural Management Unit (BMU). It comprises decrepit cells which made children feel like ‘a caged animal’.3 Young people conveyed to the Royal Commission that being isolated in high-security cells for several weeks made them feel like a ‘dog’ or a ‘rabbit in a cage’.4 In 2000, 15-year-old Johnno Wurrumbarrba died in an isolation cell in Don Dale.
Indefinite detention in BMU triggered trauma and depression among children. One child stayed in solitary confinement for 39 days. AD was there for 17 days with no sunlight, exercise or human contact. He continually asked when he would be let out. At no time was he told why he was placed there, on what grounds he would be allowed to leave, or when he could leave. The only way for children to contact the guards was via a buzzer, which often went unanswered. Children would be left screaming for a glass of water, to use the bathroom, to receive help, or simply for human contact.

After seventeen days in isolation, AD decided that his survival depended on escaping. This incident, on the night of 21 August 2014, set in motion a series of events that would lead to the tear gassing of the Don Dale BMU. When AD attempted to escape, he discovered, to his surprise, that his cell door was unlocked. Nonetheless, the riot squad was mobilised. Facing this force, AD tried to de-escalate matters by asking the guards to ‘talk it out’. He declared, ‘I give up’. The reply by a guard was that it was ‘too late’ and he would be pulverised.5

Armed officers and the riot squad proceeded to fire CS tear gas, a prohibited agent under the International Convention on Chemical Weapons, throughout the segregation unit.6 The gassing affected all of the six children in the BMU. One of the Aboriginal children, AB, who was playing cards at the time, recalled that the guards threw something like a ‘bomb’ into the isolation unit that ‘exploded’.7 Despite AB’s running to the other side of the cell and covering himself with the sheet and mattress, he was ‘affected immediately’.8 As with the others, AB felt his eyes and throat burning, found it hard to breathe, and developed a crushing headache.9 AB said that the boys ‘started shaking each other’s hands and saying our goodbyes’.10 Dylan Voller, another Aboriginal child who was locked in his cell at the time of the gassing, said he felt like he ‘was going to die’.11

After the gassing, the six Aboriginal children were ‘decontaminated’ with a fire hose, although their clothes were not replaced for several days. They were hooded and shackled on their wrists and ankles and forcibly marshalled (‘like chickens’) to vans that transferred them to the maximum-security unit of the adult prison.12 When asked why they were being shackled, a guard told them to ‘shut the fuck up’.13 For AB, the gassing resulted in ongoing health problems and self-harm. He subsequently jumped off a roof because he was ‘angry at Ken Middlebrook [Corrections Commissioner] about the tear gassing’ and he ‘felt like no one was listening to me’.14 He told the Royal Commission that being tear gassed ‘was the worst thing that happened’ and he still feels ‘really betrayed and let down by it’.15

The Royal Commission found that tear gas was used ‘in circumstances where there were no guidelines, legislative or policy safeguards’.16 Recommendation 13.3 of the Royal Commission urged the NT Government to prohibit the use of tear gas in youth detention. The final report directed the government to address the underlying inhumane conditions that spurred the unrest, and cited a youth detention review that was conducted in the month following the tear gassing:

It should be obvious to anyone that if you treat youths like animals by not communicating, threatening, belittling them, withholding food and other entitlements they will react in an aggressive way. Most of these incidents were probably entirely preventable with the use of appropriate communication and open interaction with the detainees.17
However, in November 2018 – on the one-year anniversary of the Royal Commission’s Final Report – tear gas was again deployed on Aboriginal children in detention. It followed a protest against the inhumane conditions in detention that had not substantively changed since the Four Corners program or the Royal Commission’s Final Report. Dylan Voller, who had since been released from Don Dale, explained that this was a “cry for help”.

The NT Police Territory Response Group responded to the protest by storming Don Dale and deploying tear gas on the children, defying a key recommendation of the Royal Commission. Deputy Chief Minister Nicole Manison described the police as doing “a wonderful job in a very trying situation.”

Nothing had been learnt from the harm caused to Aboriginal children in detention by the use of tear gas.

Dr Thalia Anthony is a Professor of Law at UTS. Her expertise is in the areas of criminal law and procedure and its impacts on First Nations people, with a particular interest in the colonial legacy and systemic racism in criminalisation and incarceration, as well as First Nations-owned community justice mechanisms.

Braidwood is located on a high plateau on the eastern side of the Great Dividing Range in NSW. It’s cold, and out on the plateau overcast skies break open to reveal deep flat plains coloured by granite boulders. In 1896, an observer commented that market gardens, established by Chinese migrants during the gold rush years, were the ‘only pleasant colouring in the whole landscape’.¹

Photographs from 1890 show Braidwood as it is today - in 2006 the town and its surrounds were theoretically fixed in time by a heritage listing. The main street is wide, nearly 40 metres, with 3-metre footpaths on each side; a colonial facsimile printed on the land by town planners who had served in India and reimagined its wide avenues for the streets of NSW.²

My family moved to the area in 1980. My father, who’d grown up as a Presbyterian minister’s son in Bourke and Sydney, wanted to be back in the landscape. He says landscape, but admits that when he was growing up, they didn’t call it that; they called it the bush.

Braidwood and its outlying villages were built on the land of the Walbanga people of the Yuin Nation. But we weren’t told that growing up. We were told the place came about during the Gold Rush, when miners came and carved the land for fortune. We were told it was old, but they didn’t get the numbers right. Not by a long shot.

We weren’t told what the place was called before the convicts, miners, squatters, administrators, sheep and cattle farmers, artists and writers arrived. We were left to wonder at the quiet groves of eucalypts and the dark silhouettes of the Great Dividing and Budawang Ranges rising at dusk, like hands against a lamp light. These things, and the silences, told us someone had known this place before.
The first fire started in Tallaganda National Park from a suspected lightning strike on Tuesday, November 26, 2019. It travelled east and burnt through 40,000 hectares of National Park and State forest before it reached the first house, then our place and then forked its tongue across land and property to jump the Shoalhaven and spread to within a few kilometres of the town. Our place was saved by a friend from the other side of town who called in a fire truck. The so-called North Black Range Fire burnt for 63 days.3

That same day, another fire began to come east from the coast. It started as the Currowan Fire but, as it burnt for 74 days4 and spread across 499,621 hectares and various local government areas, it took on new names; the Charleys Forest fire, the Clyde Mountain fire and the Morton fire.5

The 2019-20 bushfire season was unlike any other in its scale and devastation. Fires in NSW burned for 240 days – across seasons and into a new year. In South East Queensland, rainforests burned for the first time.6 306 million tonnes of carbon dioxide were emitted into the atmosphere. Canberra’s air quality, tested less than 100 kilometres from Braidwood, was rated the worst in the world.7

People in cities became viscerally connected to the reality of fire. Sydney filled with thick smoke that drove people indoors from November to January, the worst months of the fire season. Smoke from Australia’s east coast travelled 12,000 kilometres. The sun, once an abstract threat, burnt in ominous red and orange halos from the east coast of Australia to Auckland, New Zealand and Santiago, Chile. In Braidwood, it disappeared entirely.

Geographically, Braidwood sits between ABC Canberra 666, on the western side of the Great Diving Range and ABC South East on the coast. Because of the terrain, some parts of the area don’t get any ABC radio coverage at all. In Braidwood, the community FM radio station—The Barbed Wireless—had only just expanded its transmission range when the North Black Range Fire threatened the town.8

The radio was the only channel fast enough to keep up with the pace of the fires. People had it on 24 hours a day. At Nomchong Electrics on the main street, portable battery-powered radios sold out. The fires became hidden in a veil of smoke and for many people the radio was their only way of confirming where exactly it was.

Clouds are always double; seen from outside they are measurable objects, seen from within they are experiential conditions of optical blur and atmospheric obscurity.9

Running blind, the community fell prey to rumour and panic on social media. Referring to the difficulty of finding reliable information during the fires, one woman said, don’t believe your house is gone until you put your hand in the ashes.10

In late November 2019, station volunteers Gordon Waters and Rod McClure began to broadcast emergency updates to the community. Through the station’s window, in a donga overlooking the golf course, they watched a DC-10 drop fire retardant on the transmission tower at Mount Gillamatong. Without the tower, emergency services including the SES, RFS, police and community radio would have failed.

Gordon’s family has lived in the area for generations. He knew exactly who lived where and the unlikely pronunciations of local place names like Jembaicumbene, Euraadux, Ballalaba and Krawarree. The size of the fires meant that some teams on the ground were staffed by non-local firefighters, with no local geographical knowledge or any idea how to wrap their mouths around the landscape.

At the Senate inquest into the 2019-2020 bushfire season, Gordon described the information community radio was able to
provide as hyperlocal; it was specific to the terrain and was itself used to guide people on the ground.

The dozer operators who were building containment lines were listening to us in their dozers to know how far behind them the fire was or how far in front the fire was, because we were able to give that local level of knowledge. Likewise, people in the RFS trucks out in the field, on western side of the fire, were listening because they wanted to know where the fire was on the eastern side. The level of local information we were able to present was being used by people on the fireground at the time they were fighting the fire.11

With little or no emergency broadcasting training, they worked to bridge the gaps between the imaginary jurisdictions of the RFS and well-intentioned misinformation on the ground. They fought the firestorm with a cloud of information. They gathered real-time verifiable data from the Rural Fire Service Public Liaison Officer’s [PLO’s], the Fires Near Me NSW app, the RFS Facebook page for the Braidwood zone, and from listeners calling in. They would leave the studio in shifts, drive out to a fireground and then phone in a report. They listened to the roar of the fire and the sound of crashing trees, they felt the wind and traced the fire fronts through the smoke. They didn’t know it then, but the two of them would do 14 days of near-continuous emergency coverage of the fires and 2 months would pass before a normal routine would return.

2019 was the hottest and driest year on record and if you knew a place at all, you could tell the weather frequencies had shifted. Speed and scale were hallmarks of the 2019-2020 fire season; but fires are acts of violence fast and slow. The story of the fires began before the lightning strikes, with the shape of the terrain. And then, over time, each idea of place cut the land to fit. We called it Terra Nullius - and so it was empty. We called it the bush - and so it was untamed. We called it landscape – and so it represented a place. We called it all these things and drew a map to claim it, but we never asked its name.

The North Black Range Fire was officially extinguished at 12 pm on Tuesday, January 28, 2020. The Currowan Fire, and its many names, was set out at 8pm on Saturday, February 8, 2020. □

Stella Rosa McDonald is Curator and Manager, UTS Gallery & Art Collection.

Endnotes
10. From the embers, Episode 1, “Radio saves the day”, Community Broadcasting Association of Australia. Producer, Alice Ansara.

My thanks to Gordon Waters, Roger McDonald, Damien Hart, Bente Hart and Luke McKee for sharing their experiences.
Our Ancestors forged determination in our minds through their courage, driving us eternally to shield our homelands from colonisation and the extractive industry. In the Gulf region of the Northern Territory (NT) mining giant Glencore recently received Government approval to continue operations of one of the world’s largest zinc, lead and silver mines, the McArthur River Mine (MRM) until 2047. Contamination monitoring will continue until 3037 - a thousand years after digging stops. Elders like Jacky Green help us to recognise the power of guardianship in the Rainbow Serpent’s eyes and fathom the immensity of this destructive timeline through actions, statements and resistance painting.

When it comes to ceremony, we all together, doesn’t matter what tribe we. We all together, we must fight this thing [MRM]. The ground here, look it for Mambaliya and Gundanji Country…We been start as one and we finish as one.”

Indigenous Storywork reveals new sites of resistance as legacy in research and activism for our people in the Gulf. Esteemed Elder scholar Jo-Ann Archibald coined the term Indigenous Storywork as a theoretical, methodological, and pedagogical framework comprising of seven principles: respect, responsibility, reverence, holism, interrelatedness and synergy. It has informed conditions for cultural work that has galvanised, documented and harnessed a shielding...
force of guardianship where “culture is stronger than contamination” despite desecration.6 This response engages the forensic intent of Cloud Studies investigations through Storywork principles of respect and inter-relationality. Here a vibrant combination of oral testimony, resistance painting and image reveals major limitations in the domestic application of international rights principles such as Free Prior Informed Consent (FPIC).7

In February 2009, Midnight Oil’s lead singer Mr Peter Garrett approved the expansion and diversion of MRM into an open cut mine, one of his first acts as Commonwealth Minister for the Environment, Heritage and the Arts.8 This approval took place in defiance of long term and public outrage expressed by Gudanji, Yanyuwa, Garawa and Mara Elders - traditional owners who hold authority for the lands in the region affected. This significant campaign led to successful Supreme court rulings that initially ceased open cut mine operations. Despite united resistance, mining operations continued.

In 2014 the waste rock mountain spontaneously combusted with fire and toxic smoke that could not be extinguished for over seven months [Image 2]. It took on an unreal volcano-like lava quality and toxic smoke that could be smelled by residents in the Borroloola township, where most of the local community live, about 50 km’s away.9 The health impacts of the mine are still not clear, despite water contamination notices and major inquiries in and around Borroloola.10

In the NT, the push for fracking and related infrastructure continues within an historical context of oppressive military intervention. This includes a “gross absence of FPIC in the process of issuing petroleum exploration permits in Northern Territory.” The lack of respect for life has intensified in the past few years and in the pandemic conditions of Covid19.

Gadrian Hoosan, an emerging Garawa and Yanyuwa leader in this struggle, expects unity movements to recognise that to survive we must ensure Songlines come before Treaty; our songlines show us all the way forward they are the key to protecting all our country.12 In other words, cultural lores/laws and practices will guide leadership and survival strategies in Gulf Country and around the world. In combining Indigenous design sovereignty, sense making and citizen science, we will transcend this era of contamination in our homelands. These uncertain times focus our energies on a shared ceremony of guardianship that transcends time, borders and cultures; we been start as one and we finish as one. Indigenous storywork allows for a vibrant relational expression of this as global cultural resurgence led by Indigenous peoples.13

We continue to condemn ‘The Polluters’ of the world, state actors and corporate mining companies that wreak havoc on our lands and peoples. There are consequences for desecration.14 We seek that which is unseen and unheard in the testimony of all our relations, the fish, the birds, even the clouds.15 Eyes of united generations eternally hold the legacy of sacred resting places; Ngarmurr Jungkuryi Wankarlarnar - the cloud, was here since the beginning.16

Dr Jason De Santolo (Garawa and Barunggam) is a researcher and creative producer. He is associate professor of Indigenous Research and Practice in the School of Design at UTS. Jason co-edited Decolonizing Research: Indigenous storywork as methodology (2019) with Jo-Ann Archibald and Jenny Lee-Morgan (Zed Books). His latest documentary Warburdar Bununu/Water Shield (2019) explores water contamination in his homelands and Borroloola, Northern Territory.
Endnotes

1. An Interview with Mr Jacky Green, Australian Institute of Aboriginal and Islander Studies (AIATSIS) Native Title Newsletter, April, 2015.


4. The Road to Darwin [film], Sacred Land Film Project, 2011 https://www.youtube.com/watch?v=HonesSabElE


8. See Supra at ii.


It was believed that Wong Tai Sin 黃大仙 locals were protected by divine powers that night in August 2019.

A mask-less teenage boy was seen pouring water over a flaming canister. Submerged in a cloud of smoke, the boy is in the foreground of the image, bending towards the canister. He carefully poured liquid out of a plastic water bottle. His studious black framed glasses stood out on his bare face. His arms busy carrying an unopened umbrella, and what seemed to be a folded towel. I could not make out his expression, but his focus was unyielding. He leaned forward. One arm stretched out with precision in pouring angle and steadiness. I couldn’t see in this image, but I assumed that he held this position until the water emptied.

In the suburb that bears the name of a Taoist god, stands a century-old temple where thousands visit every day. Within its incense smoke filled complexes, fortunes are told; wishes are (sometimes) granted. Wong Tai Sin 黃大仙, the Great Immortal Wong, the God of Health, is believed to have arrived in colonial Hong Kong as a deity with a Taoist herbalist doctor at the turn of the 20th Century. Many who visited the herbalist were cured. The deity was rumoured to have miraculously survived a fire. A small shrine was built for worship and later it expanded to the giant public temple that it is now.

Looking after those who enter the temple with a kind heart and sufficient offerings, Wong Tai Sin receives wishes often through metre-long incense sticks and thick, thick smoke.
That night, when anti-riot police followed the flowing protestors into the suburb, hundreds of locals rushed to the street in their evening gowns and broad shorts. An attempt to defend their community from disturbance brought by the police, they were quickly met with pepper spray and tear gas. Many of them mask-less and without any protective gear, images showed they fought with household items.

Power ran through their blood, and for one night they were invincible.

An upside-down metallic plate on the ground. Bruised with burnt marks, the plate reflected yellow street lights that you often see in Hong Kong cinema. The livestream camera lingered on the zing jyu dip—plate for steaming fish, where the subtitles read ‘Live: Wong Ta Sin, police fired multiple tear gas canisters’.

The zing jyu dip 蒸魚碟, an old school household favourite, is ubiquitous in Hong Kong. Its quality in even heat distribution makes it a reliable piece of cookware. 12 minutes in the wok over the steaming rack would make a perfect steamed fish. Over high heat, no breaks. Steam gushes out over the rims. The plate is extremely hot to touch, however it is perfect to keep the ginger and spring onion in a boiling mix of soy and oil as it’s being served. Usually held with a special pair of tongs for the soft fingers, everyday dishes are served on this plate every night in restaurants and apartments. Steamed water eggs, pork ribs with black beans, bitter melon egg scramble, boiled prawns and many others.

As the post-Wong Tai Sin fish plate became a sort of tear gas shield, alongside tennis rackets, leaf blowers and roadblock cones, the transformation of its purpose signified the end of normalcy. The expanding steam in a tiny kitchen no longer brought comfort. The anticipation of a home cooked meal has turned into the imaginary of self-defence. What is ordinary has become extraordinary. The fish plate has been turned into a myth.

Shared on 4th August 2019, via Telegram. A poster with Wong Tai Sin deity, wearing a 3M respiratory mask. A gold statue of Wong Tai Sin sitting cross legged, a cloud of smoke in the foreground. It could be incense or tear gas. ‘Expired smoke no more, Ta Sin shall bring justice’. Calling for a city-wide strike and localised rallies, it states, ‘it is now or never’.

The next morning, many praised the bravery and miraculous skills of Wong Tai Sin locals. ‘We grew up with smoke from the temple. Tear gas is nothing to us,’ many claimed that they were in fact protected by Wong Tai Sin himself. They claimed the God of Health could no longer stand by the mess created by the Hong Kong government. Nothing is shocking anymore. It is as though they have been blessed by the gods with tear gas as offerings. They strike, protest and resist with force in the weeks and months following. In districts far beyond Wong Tai Sin, communities defend each other with an armour of hope. They have become virtuous. Tear gas, incense or smoke from a fire, it is not romantic with that stink in their eyes and that contraction in their throats. But for a believer it is strength sent from above.

Halos were formed on the heads of front liners. Named Goddess of Liberty and The Fire Magicians, protected by Wong Tai Sin they were sent on a path towards a welcoming change. An aura of strength gleamed brightly where the crowd gathered. Geared up with umbrellas, zing jyu dips and tennis rackets, divine powers had never been so accessible. Their glory is written into songs, occupying airwaves and filling people’s hearts. As the city went up in smoke, offerings were received from all directions. Tear gas and incense smoke
connected a burning city with the heavens. A mythology is being born and we are its witnesses.

There will be prosperity for all, one goddess proclaimed in her all black outfit and yellow helmet, 'after the revolution'. Gods were in the making, or rather, they were already believed to be gods.

We still believe.

願榮光歸香港。

Nikki Lam is an artist, curator and producer based on Kulin Country. Working primarily with moving images, performance and installation, her work explores hybridity often through studies of rituals, language and representations, as well as the ephemeral medium of video. Born in Hong Kong, Nikki's work deals with the complexity of migratory expressions within and beyond the concept of diaspora. With an expanded practice in writing, exhibition and festival making, she is co-director of Hyphenated Projects/Biennial and curator-at-large at The Substation. Nikki is currently pursuing a PhD (Art) at RMIT University.

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Endnotes


3. Glory to Hong Kong is the unofficial protest song of Hong Kong Anti-Extradition Bill movement. Public display of this song's content is now restricted under the National Security Law.

Full song: https://www.youtube.com/watch?v=y7yRDQLCy4Y&ab_channel=Dgxmusic

Let’s say, putting reason aside, that we could divide the history of clouds in two: those who find themselves below the clouds, and those who choose to live above them. This history would be as eccentric and dangerous as any other, and perhaps even more so, since the fate of those who find themselves underneath the clouds is to continually look upwards into the glare, inventing ways to anticipate and predict who or what might fall from above, while the fate of those above is to continually look down, wondering if or when they might, at any moment, need a place to land. Those below live without knowing whether the clouds will bring misfortune or relief. Those above live without knowing what plans are being made on the ground, and what they may be missing out on.

This history becomes less hypothetical when we turn to pictorial traditions, which have allowed the imagination to ascend and descend long before it became technologically possible for bodies to do so. Clouds were surely events for the most ancient imaginations, not only for the obvious reason that they are harbingers of weather – and constantly changing in shape and colour before the eyes – but also because they seem so close to the quality of a dream or thought—real but elusive, prone to dispersing as quickly as they form, connected and disconnected from the earth, obscuring and then revealing a view. Is it for this reason that clouds often appear in pictorial histories as expressions of the painter’s inner life, fiction whirling into fact, moods externalised, where weather and myth meet, and messages of all kinds are sought, conjured, ignored and lost?

The history of being below or above is also a history of travel, not only through the clouds, but on them. Painters from the Middle ages on often depicted clouds as transports for angels, cherubs, or saints, who visit the earth with messages or deeds, before returning to heaven. This tradition lives on in video games and cartoons, where a cloud becomes a trampoline (for bouncing) or a vehicle (for flying), or a shorthand for conflict (as in a cartoon brawl). In this tradition, the cloud allows for movement, sometimes battles, between the world above and the world below.
This makes clouds into sites where animals, objects, goodies and baddies meet, become entangled, and sometimes swap roles. Or, is it helpful to think of clouds, as the art historian Aby Warburg wrote in a different context, as “bewegtes Beiwerk” (moving or animated accessories)? Similar to fluttering garments or curtains, flying carpets, or hair caught in a gust of wind, clouds add affective intensities and drama to an image, breathing motion, action and agitation into pictorial space.¹

If you enter the Basilica of Saint Francis of Assisi, for example, look closely at Giotto’s fresco depicting the death and ascension of Saint Francis (c.1288–92). Above a crowd of friars gathered around the body, Francis can be seen again from the waist up, palms raised, rising on a wind-swept cloud with the help of winged angels. This cloud is notable not only for its introduction of weather into European pictorial space, but also for the appearance of a face (possibly with horns), visible within the cloud.² If Giotto (or one of his students) did indeed hide a demon in there, it points to long traditions of clouds as mimetic forms capable of shape shifting. It also shows the cloud as a dialectical device, where rising to heaven is not without its risks, for who knows who else may be hitching a ride. It is for this metamorphic quality that clouds were sometimes associated with demonology. Michael Psellus, an eleventh-century Byzantine monk, equated the bodies of demons and spirits with cloud formations, writing in his Dialogue on the Operation of Daemons: “Whence, just as up there in the air we observe the clouds on the semblance and form, now of men, now of bears, now of dragons, now of other sorts of animals; thus also the bodies of spirits do.”³

And if one of the defining qualities of clouds is their constant morphing, becoming this and then that, it is worth asking how today’s clouds differ to those of yesterday. At this point, demons seem to be everywhere, above and below, and even in what we might call “secularised clouds.” This is how John Ruskin, writing in the nineteenth century, was thinking of them. Not much escaped the classification impulse during Ruskin’s time, including clouds, and the critic was a keen observer of the sky, seeking to ascribe a new visual language to clouds befitting of his time.⁴ “Whereas the medieval never painted a cloud but with the purpose of placing an angel upon it...,” he wrote in Modern Painters, “we should think the appearance of an angel in the cloud wholly unnatural, and should be seriously surprised by meeting a god anywhere...We have no belief that the clouds contain more than so many inches of rain or hail...”⁵ But even Ruskin had a hard time shaking the demonic. When he delivered his famous 1884 lectures “The Storm-Cloud of the Nineteenth Century” some critics thought he was blaming air pollution on the devil, while others believed he was referring to the devil of industrialisation.⁶ As Ruskin’s observations of the sky revealed, classifications would need to contend with new clouds, brought about by a “plague-wind,” that “looks partly as if it were made of poisonous smoke” and “partly of dead men’s souls... flitting hither and thither, doubting themselves, of the fittest place for them.”⁷

Maybe this sounds all too Victorian to our ears, an instance of trying to make moral sense, from below, of the changes happening above. Or maybe it is confirmation that clouds, too, are always reflections, changing those who observe and represent them, and bringing down from on high what, in fact, may have originated below. □

Tom Melick co-edits Slug (slug.directory), and publishes small books and pamphlets with Stolon Press.
Cartoon brawl from The Loud House (2016), created by Chris Savino, for Nickelodeon.

Endnotes


2. See Chiara Frugoni, ‘Playing with Clouds,’ The Burlington Magazine, vol. 153, No. 1301, August 2011, pp. 518–20. Frugoni writes that this discovery came to light, in part, due to the observer being able “to climb, virtually, onto the medieval scaffolding.” Ascending towards the cloud, as it were.


The media shape narratives of conflict, and their power lies in their ability to do so. Yet investigations, such as those conducted in *Cloud Studies* by Forensic Architecture (2020), evidence that perceptions of reality created by the media can be challenged. Forensic Architecture’s assertion that ‘each chemical bomb is also an information bomb’, made in reference to their investigation into chemical attacks in Douma, Syria, illustrates this. This collaborative investigation with the New York Times and Human Rights Watch led to uncovering evidence that counters claims made by the Syrian regime in a report ran by Russia Today, that the bombs were planted as opposed to being dropped. The media, therefore, play an important role in influencing public opinion, and in turn hold significant power in shaping political, social, and ideological views and positions.

‘Media power’ is regarded as the power to construct social reality—that is, the way people see the world around them. Through media power, the media provides symbolic resources through which conflicts are perceived and understood, and is even more significant in influencing global crises. Interestingly, ‘[t]he mediation of global conflicts not only impacts how they are conceived by a global audience, but also shapes and determines the dynamics of the conflict itself’. On this, Simon Cottle has argued that ‘global crisis reporting serves to reproduce the voices of the powerful […] that surround, shape and inform crises clearly [and which] constitutes an important, though often overlooked, dimension of the media’s role in global crisis reporting’.

Investigative journalism is one way media power’s ability to falsely construct social reality can be challenged. By definition, investigative journalism ‘is a branch of journalism practice which seeks to uncover important and crucial happenings and occurrences that cannot be ignored or undermined’. Investigative journalism can be regarded as a form of ‘democratising’ power which counters the media’s ability to construct one reality over another. Investigative journalism plays an essential role in bringing to light new facts and relations. With this in mind, ‘investigative reporting has the potential to play a vital role in informing the public, pressuring those

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*The media are the most powerful institutions on earth - more powerful than any bomb, more powerful than any missile*
who are hiding the “secret”, and, ideally, leading to change.6

Historically, governments across the world have sought to construct the truth, especially during times of conflict. Hugh Miles notes that in the case of the Middle East, Arabs have learnt to ‘distrust everything they heard, read or saw in the media’.7 To them, the media was seen ‘as appendages of the government, which only ever echoed, never investigated or criticized, what their leaders said’.8 However, investigative journalism in the Arab region, especially in areas of conflict such as Syria, Libya and Iraq, has in fact been on the rise as a response to lack of media coverage pertaining to political corruption, war crimes and misconduct against society. Just prior to the start of the recent Syrian civil war there were a number of investigations that were conducted as a result of a few Syrian journalists receiving some training in investigative reporting. However, there were limitations on what could be reported, as long as it did not directly criticize the state. Nonetheless, investigations which were related to the people’s wellbeing at a grassroots level were tolerated. An example of these successful investigations is one that was conducted by a young journalist in Syria on negligence in local hospitals, prior to the civil war. The publication of the investigation led to an intervention from the government and a local commission that was set up to deal with the matter. The success of this investigative story was seen as a mini ‘media revolution’ in the Syrian media landscape. And Syrian reporters realised that they could hold official authorities accountable on local issues that affected the people9: there was a glimmer of hope and a sense of excitement.

Today, despite the interruption of the Syrian civil war, investigative journalism in Syria is slowly continuing. At the opening of a national workshop, held on the 25th May 2015, and co-organized with the Syrian National Committee for UNESCO promoting investigative journalism in Syria, Information Minister Omran al-Zoubi said: ‘The extraordinary circumstances in Syria stress that investigative journalism is a need now more than any time before’ in light of the various forms of misinformation and falsification that have targeted the Syrians since day one of the crisis.10 This statement is a reflection of the power the media hold in times of conflict in asserting the truth. Investigative journalism, be it independent or not, is finally having a voice in the Arab region. That officials are recognising its importance, genuinely or not, is an achievement in its own right and a recognition of the hard work and courage Arab journalists are displaying in the face of challenging old discourses of media power in the Arab world. □

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Endnotes

My father is as far from me as two people might be. As far as a national flag with nowhere to go. As far from me as the moon. When he saw Larissa Sansour’s Palestinian astronaut anchor her flag on the moon, he wept. They’ve got nowhere else to put it, he said. There is art and there is life, but for Palestinians this work is not magical realism.

In March, before our separation in Melbourne is legislated, he says: Palestinians know they’re not special. It could happen to you at any time.

Over the months of our enforced absence, I return to this phrase. I wonder if a pandemic teaches other people this same lesson; if they wake into the knowledge that pandemics don’t work by selection or care.

Say a woman, who witnesses a bombing at Rafah tells you that this kind of rocket could cut you in half. Does she mean you when she says it?

Pandemics are as indiscriminate as aerial assaults on Gaza. At that scale, people are hardly people at all. It is too long since we have been understood as people, and now perhaps everyone else has felt what it is to be made miniscule. We experience Israel with the fear and uncertainty of a pandemic.

Maybe, in a pandemic, when a woman describes a bomb, you imagine after all that it could be you. Pandemics remind us of the artifice of borders. Remind us that we share the same air and sky. A pandemic offers us some insight into life on Gaza time.

The bombing of Gaza has become a certainty. I have heard that in Gaza, life is measured by the reality of bombing, interspersed by the fearfulness of bombings to come. Gaza was groomed by Israel as a place of criminality, long before the cameras were turned its way. This occurred in the dark as grooming does, while they smiled
and shook our hands on the lawns of the White House. Israel always has an eye as to what photographs well.

After the Siege of the Church of the Nativity, twenty-six Palestinian men, described as militants, were exiled to Gaza. But if the militants were inside the church, with monks who remained to enforce their sanctuary, then who performed the siege? These answers are always obscured as they are reported in news and mediated by English.

A map produced to remember the dead after Operation Protective Edge, superimposed one place over another: Gaza inserted over Melbourne. My father and I live half of the length of Gaza apart by road. Right now, we live just as far as if we were residents of Gaza. It is more than seventy years since maps indicated time in Palestine. It is not the road or a river that divides us this year, but the impossibility of movement and our humility towards a pandemic in whose wake we appreciate that we are not special.

Sometimes on the phone I read my father sections from *Arabic for a Shilling*. I cannot speak Arabic and Dad cannot speak Arabic without an interlocutor. There are fewer now who can recall the dialect of Jerusalem in the year of his birth.

We laugh over the entry ‘AT THE DEALER’S IN ORIENTAL OBJECTS’. We laugh at the men of His Majesty’s Forces in the Middle East, for whom Steimatzky prepared the guide, saying ‘we have not yet seen any old pottery’ and ‘have you any carpets’? We laugh, at the quaint orientalism of the people who orientalised us.

Achille Mbembe observes that in the wake of this calamity ‘many states will seek to fortify their borders in the hope of protecting themselves from the outside’.¹ He observes ‘they will also seek to conceal the constitutive violence that they continue to habitually direct at the most vulnerable’.² Israel does not wait for the pandemic to end. It begins dismantling field clinics for Covid testing in Occupied Palestine. It seems Israel has been omniscient for so long that it believes it can control a pandemic as if it were a Palestinian. In dismantling clinics, Israel makes its own risk a certainty. Can a pandemic teach an oppressor that their lives, and our deaths, are connected?

When Israel assaults Gaza from the sky, it warns the residents. This is important from a moral perspective; the morality it touts as each successive investigation of war crimes is made to die on the vine. One warning is called a ‘knock on the roof’, an innocuous linguistic disguise wrapped around small explosions.

What choice do you make at 3am, asleep in your house at the sound of a knock on the roof? In Melbourne, a pandemic shrinks the horizon and formulates a paradox between our instinct to run and new boundaries around our lives. For Gazans this is old news; for Gazans there has been nowhere to run for more than thirteen years.

In Gaza, there is no right action; when you stay, you are stripped of civilian status, a transformation that takes approximately ninety-seconds. Israel’s military doctrines are always transforming Palestinian bodies into hostile entities: Gazans are punished for Israel’s failure to extinguish Palestinian identities. After ninety-seconds a resident is no longer a resident. After ninety-seconds, even at 3am, a resident is no longer innocent.

In six months, Melbourne has not lost half the number of Gazan civilians killed by Operation Protective Edge, which lasted not even one month.

Today I hear rain on my roof and on my father’s down the phone line. We cannot see between the clouds, where one ends and another begins. We will not see the moon tonight I think, which often holds us together although we are apart, under the same sky. □
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Endnotes
2. Mbembe, A. 'The Universal Right to Breathe'.
CLOUD STUDIES

Texts commissioned by UTS Gallery on the occasion of the exhibition Cloud Studies by Forensic Architecture

Curated by Stella Rosa McDonald and Eleanor Zeichner
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