



Journal of Architectural Education

ISSN: 1046-4883 (Print) 1531-314X (Online) Journal homepage: www.tandfonline.com/journals/rjae20

Pilbara Interregnum

Jorge Valiente Oriol, Amaia Sánchez-Velasco & Gonzalo Valiente Oriol

To cite this article: Jorge Valiente Oriol, Amaia Sánchez-Velasco & Gonzalo Valiente Oriol (2024) Pilbara Interregnum, Journal of Architectural Education, 78:2, 490-505, DOI: <u>10.1080/10464883.2024.2382034</u>

To link to this article: <u>https://doi.org/10.1080/10464883.2024.2382034</u>

© 2024 The Author(s). Published with license by Taylor & Francis Group, LLC.

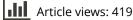


0

Published online: 09 Oct 2024.

٢	
L	

Submit your article to this journal \square





View related articles 🗹



View Crossmark data 🗹

Image

Pilbara Interregnum



Figure 1 (Opening Figure). General view of the multimedia installation *Pilbara Interregnum: Seven Political Allegories* at the 18th Biennale Architettura—*The Laboratory of the Future.* Photograph by Clelia Cadamuro.

> Jorge Valiente Oriol University of Technology Sydney

> Amaia Sánchez-Velasco University of Technology Sydney

> **Gonzalo Valiente Oriol** University of Technology Sydney

© 2024 The Author(s). Published with license by Taylor and Francis Group, LLC. This is an Open Access article distributed under the terms of the Creative Commons Attribution-NonCommercial-NoDerivatives License (https://creativecommons.org/licenses/by-nc-nd/4.0/), which permits non-commercial re-use, distribution, and reproduction in any medium, provided the original work is properly cited, and is not altered, transformed, or built upon in any way. The terms on which this article has been published allow the posting of the Accepted Manuscript in a repository by the author(s) or with their consent.

This visual essay discusses a three-yearlong research project that resulted in Pilbara Interregnum: Seven Political Allegories—a multimedia installation by Grandeza Studio (Amaia Sánchez Velasco, Jorge Valiente-Oriol, and Gonzalo Valiente-Oriol) for the 18th Biennale Architettura—*The Laboratory of the* Future-curated by Lesley Lokko. This transdisciplinary work follows the material, discursive and symbolic traces of violence on and over bodies and territories in the Pilbara—a northern region of Western Australia affected by processes of colonial and neocolonial dispossession. Seven political allegories emerge from seven unresolved territorial disputes and restage the region from a contested resourceextraction site into an epistemological war of political imagination.

Keywords: political imagination, energy transition, speculative fabulation, multiscalarity, allegory

Pilbara Interregnum¹: Seven Political Allegories

Pilbara Interregnum: Seven Political Allegories is a multimedia architectural installation by Grandeza Studio (Amaia Sánchez Velasco, Jorge Valiente-Oriol, and Gonzalo Valiente-Oriol) commissioned for the 18th Biennale Architettura—curated by Lesley Lokko under the title *The Laboratory of the Future*, and exhibited in the "Dangerous Liaisons" section.

Pilbara Interregnum is the result of a three-year-long research project and pedagogical exploration,² developed within and beyond cultural institutions, universities, and art residencies across Australia, Chile, and Spain.³ Reflecting the nature of our practice—the study and challenge of late capitalist spaces through critical analysis and politico-spatial imaginaries—*Pilbara Interregnum* embraced dissonant and diasporic encounters with "other" extraordinary companions and the development of the work between three different continents and time zones. This way of working triggered many of the aesthetic, representational, and discursive complexities and contradictions present in our choral and transdisciplinary work.

The Pilbara⁴

The research follows the material, discursive and symbolic traces of historical and contemporary forms of violence applied over territories and bodies in the Pilbara—a northwestern region of Australia affected by colonial and neocolonial dispossession and extractive violence processes.

The Pilbara is an immense, arid, and thinly populated territorial crust located north of Western Australia. Since the first colonial intrusions—just 160 years ago⁵— the progressive "discovery" of its rich mineral deposits has transformed the region into a spatio-temporal battlefield of expulsions, explosions, and exploitation— all perpetrated in the name of the Commonwealth's extractivist mythologies. Despite its label as Australia's economic "powerhouse," the Pilbara suffers from significant infrastructural underdevelopment and high rates of racialized social exclusion while remaining hardly accessible (both physically and culturally) from and for most of the nation's territories and populations.⁶

Today, long-established iron ore, gas, and petrol mining operations collide with the incursion of additional stakeholders in search of its recently "discovered" reserves of lithium and rare earth minerals. The abundance of these coveted metals, its extreme exposure to solar radiation and wind, and its privileged access to the Indian Ocean position the Pilbara at the core of the so-called Planetary Energy Transition. It is a locus of the twenty-first-century green-gold rush.

Pilbara Interregnum embraces the contradictions inherent in today's energy paradigm shift to problematize and trouble the extractivist, colonial, and capitalist mythologies that threaten to turn the region further—and progressively, the rest of the planet—into an expansive constellation of "sacrifice areas." Departing from seven unresolved territorial disputes, the project acknowledges the Pilbara as a center-stage territory where today's most radical (geo)political and epistemological transformations are already taking place. We present seven political allegories that restage the Pilbara by moving it away from a resource-extraction battlefield into an epistemological war of political imagination.

The Installation

The installation consists of a three-channel audiovisual piece surrounding a territorial scenographic model of the Pilbara region. The spatial configuration welcomes visitors into a dark space where a five-and-a-half meter-long multiscale golden model of the region seems to float in a dark space. The model is surrounded by a triptych composition of screens displaying a film divided into eight capsules: an introduction and the corresponding seven political allegories.

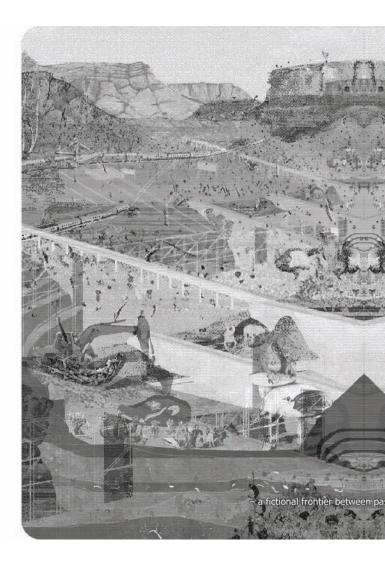
The project gravitates around critical and speculative revisions of allegorical traditions in pictorial and architectural representation's complicity in disseminating and sustaining colonial myths. In all their forms (oral, written, pictorial, or scenographic), allegories use symbolic figures, actions, objects, characters, and spaces to make seemingly ungraspable concepts, ideas, and events legible, tangible, and apprehensible. Allegories bridge



scales and connect the local with existential, universal, or structural matters. They represent unresolved struggles or mysteries that need to be decrypted, sometimes rendering visible—and, most commonly, strategically veiling—the violence intrinsic to the ideals they promote.

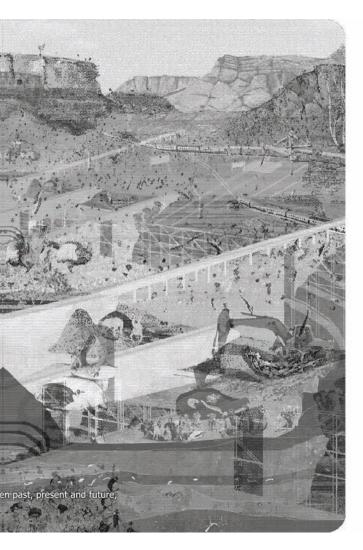
Seven Political Allegories

The seven allegories delve into spatiotemporally situated territorial disputes, unveiling a series of violent factual events that occurred within specific locations and times in the Pilbara. Each allegory is cinematographically narrated by an actual-sized (more-than-human) character, directly referring to anthropomorphic figures from European allegorical painting traditions. Architecturally, each allegory resignifies and repurposes one of the vital colonial typologies and infrastructures instrumentalized to vertebrate the region's dominant representation as an extractivist playground, being those: (1) the mine, (2) the vehicle, (3) the reserve, (4) the farm, (5) the port, (6) the company town, and (6) the war memorial.



In the following section, we visually and textually introduce each allegory, including their associated disputes and the injections of political imagination conceived and staged to immerse audiences in a collective remythologization of the present.

Political Allegory 1: *Unearth/Re-earth the Mine.* Drawing by Caitlin Condon with montage by Grandeza Studio. Film still.

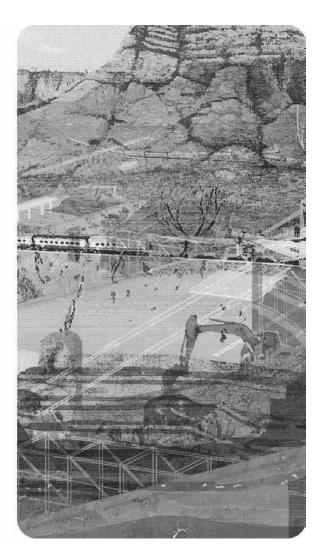


Political Allegory 1: Unearth/Re-earth the Mine (with Caitlin Condon)

Location: From Burrup Peninsula to Marandoo Mine

In 2020, mining giant Rio Tinto blasted the Juukan Gorge, a sacred Aboriginal site and Australia's only inland area with evidence of over 46,000 years of continuous inhabitation.⁷ The destruction of the Juukan Gorge was "legal" per Western Australian land use rights under the Aboriginal Heritage Act 1972. Its controversial Section 18⁸ gives the Minister powers to allow the destruction of Aboriginal heritage sites without granting traditional owners a right of appeal.

The Juukan Gorge case was not an exception.⁹ Following the federal inquiry into its blasting, further investigations revealed that Rio Tinto had already dumped hundreds of Eastern Guruma cultural artifacts in Darwin. Up to 18,000 years old, the artifacts were abducted from the Marandoo mine and dumped hundreds of kilometers away in the 1990s. After 25 years of official silence, the resurgence of this operation



has haunted public debate, with communities loudly calling for and demanding a cease and desist.

Unearth/Re-earth re-imagines the Marandoo mine as a somatic archive—an infrastructure for the reparation and renegotiation of collective memories. The allegory imagines the potential sequestration of the Marandoo mine and its entire network of extraction and distribution, repurposing the mine as a critical archeological infrastructure in service of visceral interrogations of our pasts, presents, and futures. On this site, rites of unearthing and re-earthing are collectively enacted. Monuments celebrating heterocolonial heroes would be confiscated from the world's squares and brought for permanent archival custody. Terraforming, not as extractivism, but as collective profanations of imperial myths.

Here, the Marandoo mine stages conflicting visions in which burying, earthing, unearthing, and re-earthing would become dialectical tools for perpetual debate.



Political Allegory 2: *Deviate the Vehicle*. Photograph by Clelia Cadamuro.

Political Allegory 2: *Deviate the Vehicle* Location: Marble Bar and Mars

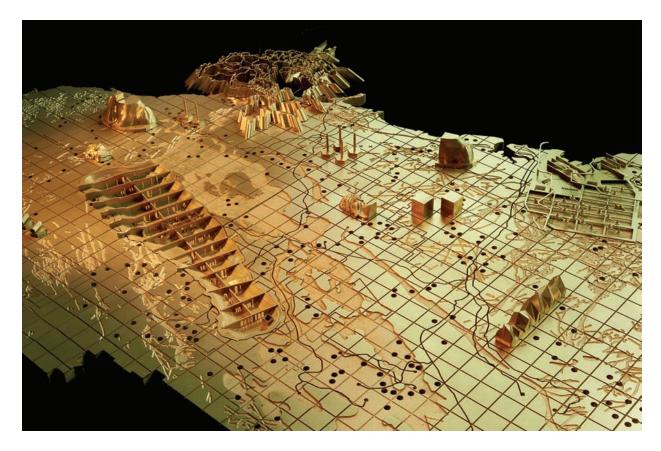
In 2015, University of Sydney scientists extracted a mineral fragment from a rock formation near Pilbara's Marble Bar¹⁰ as part of a research project that looked for potential evidence of past life on Mars. A few years after, in 2021, NASA's Perseverance Rover successfully landed on Mars carrying that fragment.¹¹ According to the researchers, they were sending "a geological postcard from Pilbara to Mars."

The Perseverance was not the first vehicle carrying "minerals" from Pilbara to Mars. In 2018, global media broadcasted Elon Musk's Tesla Roadster floating in outer space¹²—whose battery was powered by lithium most probably extracted from Western Australia.¹³ In contrast to the Perseverance's scientific expedition in search for past life in outer space, Elon Musk's vehicle sought to promote mining-focused future settlements of humans on the red planet as part of a broader techno-feudal deregulation of the cosmos, instigated by the US's 2015 SAPCE Act.¹⁴

This allegory compares Australia's Terra nullius

doctrine¹⁵ to the *Mars nullius*¹⁶ one, as evidence of the prevalent embedding of imperial and colonial narratives in dominant myths of progress, adding critical depth to existing geological ties between Mars and the Pilbara.

Highlighting architecture's protagonism in the construction of extraterrestrial colonial imaginaries, the Capot Marzio ("Mars' Hood") is an architectural document that critically connects Mars' past, present and future by bringing together a constellation of architectures conceived for the Red Planet by architects, engineers, and cinematographers.¹⁷ Embedded on a 1:1 Tesla Roadster hood, a model of an "ideal" city inspired by Piranesi's Campo Marzio (literally, Field of Mars) stages a preemptive ruination of the interplanetary extractivist future promoted by Musk. Borrowing Tafuri's words on Piranesi's Campo Marzio, the Capot Marzio is an "architectural banquet of nausea, a semantic void created by an excess of visual noise." If, for Piranesi, the ruin is architecture's irreducible essence, the Capot Marzio stages contemporaneity>s ruin through a continuum of 3D printed filaments defecated with the precision of a programmable robotic arm.



Political Allegory 3: *Unframe the Reserve*. Photograph by Clelia Cadamuro.

Political Allegory 3: *Unframe the Reserve* Location: Carnarvon Artesian Basin

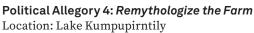
In July 2021, mining giants such as BHP and Rio Tinto, FMG, and Cameco, among others, invested large sums in research projects to unravel the mysteries of stygofauna¹⁸ in Western Australia and the Northern Territories.¹⁹ While among Australia's quietest and least visible creatures, stygofauna hold power over the shape and size of some of Australia's biggest mines.

More than 95 percent of Western Australian iron ore is extracted from large, open-pit mining operations that require the removal of groundwater to access the ore that sits below the water table. The Pilbara hosts a uniquely dense diversity of stygofauna, coinciding with some of the world's highest concentrations of iron ore mines. Dewatering affects the springs, karstic, and porous alluvial aquifers inhabited by this extreme subterranean biodiversity, thus compromising its survival. Indeed, the balance of vast groundwater deposits—like the Carnarvon Artesian Basin—depends on stygofauna's purifying mechanisms and is fundamental for the region's ecosystemic viability—as scientists expect rainfall to decrease due to climate change.

The Pilbara's Blind Cave Eel (*Ophisternon candidum*) is a stygofauna endemic species living in underground environments of the Carnarvon Artesian Basin. Blind, invisible, and inhabiting the Earth's crust, this unique creature invites audiences to unlearn cultural dependencies on visual perception—such as the picturesque or the sublime—inherited from Western modern epistemologies. Instead, this 'monster' asks visitors to imagine what the unpicturesque or the unsublime could be.

What do we preserve? What is a reserve, and why do we reserve? For how long, and for whom? Can we preserve the unknown?





In 1897, Anglo-Australian settler Frank Hann thought he had found evidence of an interior sea in Western Australia's Little Sandy Desert. Following inland-flowing creeks—and hoping to reach large volumes of exploitable freshwater—his expedition arrived at a salt lake, which he labeled as "Lake Disappointment," a derogatory moniker that remained as the lake's official title until 2020, when it recuperated its traditional Martu name.

In April 2011, Reward Minerals announced an agreement with executives of the Western Desert Aboriginal Corporation to extract 25 million tons of potassium from the lake, mainly used to produce synthetic fertilizers, rocket fuel, matches, fireworks, and bombs. The agreement raised concerns and discomfort among members and elders of the Martu people—traditional owners of the lands on which the lake sits and for whom the Kumpupirntily holds vital cultural significance. Indeed, for the Martu people, below the lake is an underworld inhabited by

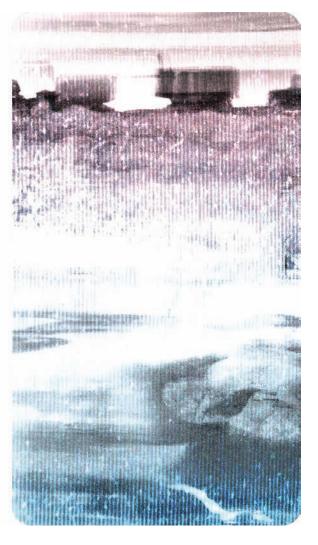


the terrifying *Ngayurnangalku*, cannibal creatures with human appearance who will abduct, kill, and eat anyone who dares to cross the lake's forbidden boundaries.

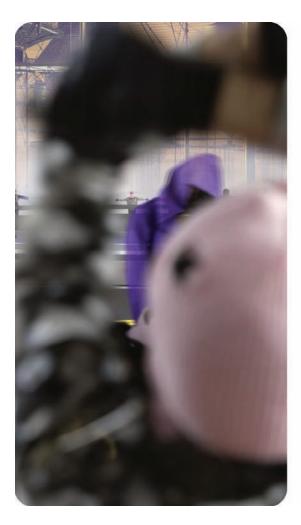
Unfortunately, the main reason why Kumpupirntily has remained protected from intensive extraction for millennia was not the fearsome ferocity and cultural significance of its ancient 'imaginary' inhabitants but rather a consequence of its supposed lack of exploitable fertility.

Remythologize invokes the lake's ancestral inhabitants to feed decolonial imaginaries with emancipatory reterritorializations of fear and terror. Ultimately, this allegory reclaims the possibility of granting legal and political personhood to mythological subjects as part of a broader venture to remythologize (or reenchant) the present.





Political Allegory 4: *Remythologize the Farm*. Film still.



Political Allegory 5: *Interrupt the Port* (with James Feng) Location: Port Hedland

The 1946 Pilbara Strike was the longest industrial action in Australian history, interrupting wool exports—one of the country's most profitable industries at the time²⁰—for approximately three years. Aboriginal workers defied pastoral landlords while reclaiming their independence from colonial patriarchy and the end of slavery. The strike became a milestone in the region's—and Australia's—political history, forcing fundamental negotiations to address historical injustices.²¹

Sixty-eight years later, in November 2014, Port Hedland's tugboat workers threatened interrupting iron-ore exports, putting at stake Australia's most profitable business at the world's largest bulkhandling port—a colossal harbor only made navigable by the constant dredging of its estuarine seabed.

Interrupt reclaims Pilbara's unique political legacy to stage a Planetary Strike. The allegory invites audiences to imagine that—nurtured by environmentalist and social desires—Port Hedland's dissident dredging

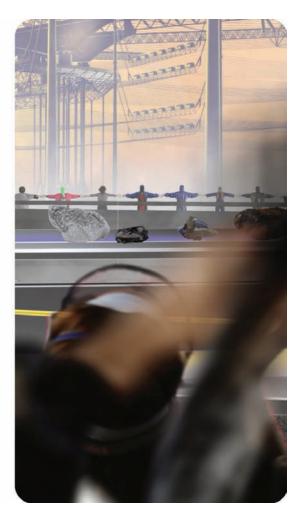


operators initiate an indefinite strike, abandoning relentless efforts to discipline the harbor's muddy seabed.

Envisioning the mineral port's interruption inquires what actors—within increasingly atomized and automatized productive webs—may strike to leverage urgent structural changes. Can we interrupt the grand logistical theater and revert current flows that simultaneously boost commodity free-trade while applying selective restrictions to the mobility of human bodies? Can algorithms strike? Can Port Hedland become an area of exception where antimigrant 'Stop the Boat'²² policies shift their ravenous campaigns towards mineral export?

Considering carnivals as political time-spaces of exception—where productivist agendas are set aside in favor of collective joy, experimentation, uncertainty, pleasure, and fantasy—*Interrupt* imagines a carnivalesque planetary strike in which algorithmic systems, human and nonhuman, in alliance with meteorological events, could collapse the production lines, not as an apocalyptic blockbuster, but as a global prompt to rethink the very purpose of existence beyond extraction, exploitation, and expulsion.





Political Allegory 5: *Interrupt the Port*. Drawing by James Feng with montage by Grandeza Studio.



Political Allegory 6: Distribute the Company Town (with Jordi Guijarro)

Location: Asian Renewable Energy Hub, Pilgangoora

20 km south of the Pilbara's Eighty Miles Beach, a solar and wind megafarm project known as the Asian Renewable Energy Hub (AREH) would occupy 6,500 square kilometers, approximately half of Sydney's metropolitan area.²³ The project aims to provide "green energy" to Australia and several Southeast Asian countries in the vicinity, but it also aspires to become a symbolic powerhouse of the Global Energy Transition and of Australia's—rather dubious—decarbonization process.²⁴

The Company Town speculates on repurposing AREH as a colossal urban/territorial laboratory to test the first post-labor metropolis in the world, where forms of coexistence would occur away from the mandates of productivity and reproductivity.

Inspired by the dissenting *Tang-ping* (lying-flat) movement amongst Chinese millennials, who vowed to desert China's 996 work culture,²⁵ the citizens of AREH would also quit and live "free of anxiety," caring for the machines while the machines take care of them. AREH



becomes here a full-scale urban laboratory where citizens collectively and experimentally participate in the construction of urban and domestic rituals driven by unproductive agendas, as well as by horizontal redistributions of wealth and power, and with universal access to education, culture, food, health, shelter, and of course, energy. Moreover, the extra energy produced in the plant would be shared with other neighboring countries, such as Cambodia, Indonesia, Laos, Thailand, Vietnam, and Myanmar, to support decarbonizing agendas beyond nation-state boundaries. Political Allegory 6: *Distribute the Company Town*. Photograph by Clelia Cadamuro.



Political Allegory 7: Become the War Memorial (with Laura Domínguez Valdivieso) Location: Montebello Islands

On 3 October 1952, Operation Hurricane inaugurated the British atomic race with a plutonium implosion detonation that left a 300-meter crater on the Pilbara's Montebello Islands' seabed. That day, Australia became the first country in history to cede its territory to conduct nuclear tests. The chosen location's presumed remoteness took its local and neighboring human and nonhuman populations for granted. Robert Menzies, Australia's Prime Minister at the time, had approved a total of twelve British detonations on Australian territory as a means to cultivate alliances with its "great and powerful friends."26 Indeed, four years later, Operation Mosaic detonated two additional blasts, the latter being four times stronger than Hiroshima's, expanding a dust cloud that reached Queensland²⁷ – more than 2,655 km away. Today, still, the islands remain a radiation hazard.

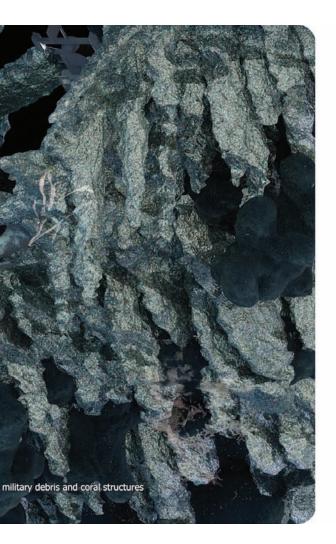
Two parallel comebacks revive the region's 1950s nuclear memories sixty years later. On the one hand,



the Islands have recuperated previously blasted coral reefs, as well as their decimated turtle and whale shark populations, turning into a "human-free paradise" that mirrors the exceptional wilderness takeover seen at Chernobyl's Exclusion Zone.²⁸ On the other hand, Australia's recent agreement to build nuclear-powered submarines for the AUKUS defense alliance with Great Britain and the United States²⁹ adds fuel to the fire in an unprecedented escalation of nuclear tensions since the end of the Cold War—a dangerous comeback to the scenario that triggered the three historical detonations.

The War Memorial imagines the Montebello Radiological Reserve: a monument conceived to sequestrate and permanently archive Australia's past and present nuclear arsenal. It is a monument to the future, an unnatural reserve in perpetual becoming, a living and dying mausoleum formed by an alliance between radiotrophic fungi, military debris, and coral structures that would only be accessible to humans after the end of today's Planetary Civil War becomes effective.

Can we abandon the war theater and turn theater into an epistemic bomb?





Political Allegory 7: Become the War Memorial. Drawing by Laura Domínguez Valdivieso with montage by Grandeza Studio. Film still.

Conclusion

The seven political allegories do not attempt to force a solution (or resolution) for the territorial disputes. Instead, each capsule inhabits (and intervenes in) the existing struggles with a threefold ambition: to render visible and challenge the existing power asymmetries; to bring forward their agonistic potential for an open and urgent public debate; and to draw upon their irresolution as a visceral time-space in which new forms of political imagination can emerge.

Notes

- 1 *Interregnum* is a Roman legal term referring to the interim period between the death of a sovereign and the enthronement of the successor, a moment of political indefinition where anything could happen.
- 2 Pilbara Interregnum: A Time for Monsters was an architectural design & research studio led by Jorge Valiente-Oriol that took place at the University of Sydney in 2021. Two students who partook in this subject, Caitlin Condon and James Feng, were later coauthors of two audiovisual installation capsules presented in Venice.
- 3 Collaborative institutions included The University of Sydney (host of the graduate design studio), University Andrés Bello in Chile (where one of the allegories was developed with students during a three-month research residency), the University of Technology Sydney (where, amongst other forms of support, the voices for the film were recorded), and Las Cigarreras in Alicante (that provided space and resources to produce the multimedia installation), and the the Fab Lab of the University of Alicante (that helped fabricating the model).
- We acknowledge that sovereignty over the Pilbara was never 4 ceded by the peoples who inhabited its territories for over 45 thousand years (but forcefully taken by those who still claim sovereignty over it and keep exploiting its resources). We admire the diversity of languages and cultures that inhabit these lands: the Banyjima, Bayungu, Binigura, Burduna, Jiwarli, Juwaliny, Karajarri, Kariyarra, Kartujarra, Kurrama, Mangala, Manyjilyjarra, Martu Wangka, Martuthunira, Ngarla, Ngarluma, Nyangumarta, Nyamal, Nyiyaparli, Putijarra, Thalanyji, Tharrkari, Warnman, Yindjibarndi, Yinhawangka, and Yulparija peoples. And we support their continuous struggle to recuperate their stolen country. We would like to pay respect to Elders, young, women, men (or anyone that refuses to fit within either of these binary categories), as the traditional custodians of knowledge of the lands that our imagination has dared to overflow. It was never (and will never be) our intention to supersede the indigenous futurabilities and imagination, which we support with our strongest rejection of the colonial and extractivist commonsense that keeps terraforming the region without remorse. In addition, and considering the current global warlike drift, we would like to extend our acknowledgement and respect to any and everyone suffering prosecution, slavery, precariousness, invisibilization, abuse, dispossession, and expulsion both in Australia and elsewhere in the world.
- 5 The first recorded colonial land explorer in the Pilbara was Francis T. Gregory in 1861. Gregory estimated that there were two or three million acres of land in the district suitable for grazing, and he also drew attention to the possibilities of the pearl-oyster industry. A few years later, pastoral stations and pearl harborers had settled in the region, while indigenous Australians were dispossessed and forced to work for them. Today, a memorial at

Richardson Street (BHP Billiton Marrapikurina Park) in Port Hedland, commemorates Francis T. Gregory.

- 6 Amelia Sarson, "Fears over Aboriginal Child Removals as Report Reveals 'Endemic Racism' in WA Department of Communities," ABC News, February 03, 2022, https:// www.abc.net.au/news/2022-02-03/fears-rates-ofaboriginal-children-removed-from-families-rising /100772704?fbclid=IwAR3O1n5vE9sfg4ueKRS9Xap7s U5TnVXM19tH_hz8RYZGJcMW14KkptPWOik.
- 7 Calla Wahlquist, "Rio Tinto Blasts 46,000-year-old Aboriginal Site to Expand Iron Ore Mine," Guardian, May 26, 2020, https://www.theguardian.com/ australia-news/2020/may/26/rio-tinto-blasts-46000year-old-aboriginal-site-to-expand-iron-ore-mine.
- 8 Peter de Kruijff, "New WA Aboriginal Heritage Act Leaves Final Say on Cultural Site Protection with Minister," WA Today, November 17, 2021, https://www. watoday.com.au/politics/western-australia/new-waaboriginal-heritage-act-leaves-final-say-on-culturalsite-protection-with-minister-20211116-p599i0.html.
- 9 Lorena Allam and Calla Wahlquist, "More than 100 Aboriginal Sacred Sites—Some Dating before the Ice Age—Could Be Destroyed by Mining Companies," *Guardian*, August 28, 2020, https://www.theguardian.com/australia-news/2020/ aug/28/more-than-100-aboriginal-sacred-sites-somedating-before-the-ice-age-could-be-destroyed-by-miningcompanies#:~:text='We%20don't%20know%20very%20much%20about%20them'&text=They%20estimate%20that%20 434%20of,close%20to%20current%20mining%20areas.
- 10 Louise Miolin and Kelly Gudgeon, "Pilbara's Marble Bar Can Unlock Mysteries of Earth's Origin, but It Must Be Protected, Scientists Say," ABC News, April 6, 2021, https:// www.abc.net.au/news/2021-04-06/pilbara-granite-rockstudy-could-unlock-earths-origin-story/100049236.
- 11 For more on this topic see Patrice Rey, "A Geological Postcard from Australia to Mars on NASA Perseverance," University of Sydney, February 17, 2021, https://www.sydney.edu. au/news-opinion/news/2021/02/17/nasa-perseverancemars-geological-postcard-from-australia-pilbara.html.
- 12 See live views of the Tesla Roadster at "Live Views of Starman," Space X, February 6, 2018, YouTube video, https://www.youtube.com/watch?v=aBr2kKAHN6M.
- 13 In response to the accusation that the US government organized a coup against Evo Morales in Bolivia in order for Tesla to secure lithium there, Musk tweeted: "We will coup whoever we want! Deal with it." After deleting this statement, Musk's following tweet added "Also, we get our lithium from Australia." For more on this topic see Douglas Rushkoff, "We Will Coup Whoever We Want!': The Unbearable Hubris of Musk and the Billionaire Tech Bros," *Guardian*, November 25, 2023, https://www.theguardian. com/books/2023/nov/25/we-will-coup-whoever-we-want-theunbearable-hubris-of-musk-and-the-billionaire-tech-bros.
- 14 The Spurring Private Aerospace Competitiveness and Entrepreneurship Act is a legal framework that incites North American citizens to explore and commercially exploit space resources, paving the way for interplanetary corporate mineral prospecting by circumventing the international agreements reached in the Outer Space Treaty of 1967—that prevent any state from exercising "national appropriation by claim of sovereignty, through use or occupation, or by any other means" of extraterrestrial bodies. For a more in-depth interrogation of the implications of this legislative change, see Rania Ghosn and El Hadi Jazairy, *Geostories: Another Architecture for the Environment* (Barcelona: ACTAR, 2019).

- 15 Terra nullius is a Latin term that means "land belonging to no one." It was used as a legal tool to legitimize the dispossession, dispersal, and inhumane treatment of First Nations peoples in the process of colonization of Australian territory. As Aileen Moreton-Robison explains in The White Possessive: Property, Power, and Indigenous Sovereignty, the term was interpreted as a complete absence of people and additionally the absence of "civilized" people capable of land ownership; A. Moreton-Robinson, The White Possessive: Property, Power, and Indigenous Sovereignty (University of Minnesota Press, 2015); M. Connor, The Invention of Terra Nullius: Historical and Legal Fictions on the Foundation of Australia (Macleay Press, 2005); I Watson, "Re-centring First Nations Knowledge and Places in a Terra Nullius Space," AlterNative: An International Journal of Indigenous Peoples 10:5: 508–20.
- 16 The techniques used by colonial settlers to map and conquer "New Worlds" on Earth are now applied to impose a sort of Martian *Terra nullius*, or *Mars nullius*, where perfectly defined craters, mountains, crags, and plains define the ultimate frontiers of extraction, delineated by means of cartographic, photogrammetric, and toponymic techniques. The level of definition of the Martian surface determines the credibility of a virulent and improbable encounter.
- 17 Hyperrealistic renderings signed by star architects (such as Norman Foster or BIG); cinematographic models; architectural competitions to imagine 3D printed habitats organized by the Mars Society or by NASA; video games; television sets; digital animations; telescopes; planetariums; shuttles; rockets; as well as research centers in hostile Earthly environments... form an array of protuberances imaginarily landing, emerging, penetrating, and terraforming the red, stony, arid, and inhospitable crust of Mars.
- 18 Stygofauna is a term derived from Greek mythology, in which travelers crossed the river Styx as they descended into Aïdes ("the Unseen"), god of the dead and king of the underworld, who reigned in the depths of the Earth.
- 19 Emma Young, "Australia's Miners Throw Money at 'Minimonsters' Causing Major Headaches," Sydney Morning Herald, July 5, 2021, https://www.smh.com.au/national/ australia-s-miners-throw-money-at-mini-monsterscausing-major-headaches-20210701-p585yr.html.
- 20 James Liveris, "Remembering the 1946 Pilbara Strike, Australia's Longest, That Paved the Way for Indigenous Rights," ABC News, November 15, 2020, https://www.abc.net.au/news/2020-11-15/ one-of-australias-longest-strikes-1946-pilbara/12877286.
- 21 For more information on the Pilbara Strike movement see the film *How the West Was Lost*, directed by David Noakes in 1987.
- 22 More information on this topic can be found at: Eve Lester, "A Campaign to 'Stop the Boats," in *Making Migration Law: The Foreigner, Sovereignty, and the Case of Australia* (Cambridge: Cambridge University Press, 2018) 292–312.
- 23 Adam Morton, "Green Giants: The Massive Projects That Could Make Australia a Clean Energy Superpower," *Guardian*, November 13, 2020, https://www.theguardian.com/ environment/2020/nov/14/green-giants-the-massive-projectsthat-could-make-australia-a-clean-energy-superpower.
- 24 Adam Morton, "Coalmine Approvals in Australia This Year Could Add 150m Tonnes of CO2 to Atmosphere," *Guardian*, September 2, 2023, https://www.theguardian.com/ environment/2023/sep/02/coalmine-approvals-in-australiathis-year-could-add-150m-tonnes-of-co2-to-atmosphere.
- 25 Shen Lu, "America Had 'Quiet Quitting.' In China, Young People Are 'Letting It Rot," Wall Street Journal, December 18, 2023, https://www.wsj.com/world/china/americahad-quiet-quitting-in-china-young-people-are-lettingit-rot-5f10d4a0?mod=Searchresults_pos2&page=1.

- 26 For more information on the detonations, see the documentary *Operation Hurricane* by Anvil Films for the British Ministry of Supply and Department of Defence II, Central Office, 1952, https://www.iwm. org.uk/collections/item/object/1060022141.
- 27 For more information see Mr. Justice J. R. McClelland, "Royal Commission Into British Nuclear Tests in Australia," November 20, 1985, vol. 2, https://parlinfo. aph.gov.au/parlInfo/download/publications/tabledpapers/ HPP032016010929/upload_pdf/HPP032016010929. pdf;fileType=application%2Fpdf#search=%22publ ications/tabledpapers/HPP032016010929%22.
- 28 For more information on the environmental recovery of the Chernobyl Exclusion Zone, see UN Environment Programme, "How Chernobyl Has Become an Unexpected Haven for Wildlife," https://www.unep.org/news-and-stories/story/ how-chernobyl-has-become-unexpected-haven-wildlife.
- 29 Kathryn Armstrong, Frances Mao, and Tom Housden, "Aukus Deal: US, UK and Australia Agree on Nuclear Submarine Project," BBC News, March 14, 2023, https:// www.bbc.com/news/world-australia-64945819.

Jorge Valiente Oriol is an architect, educator, researcher, and codirector of Grandeza Studio—an architectural practice whose body of work entangles with research, pedagogy, and critical spatial practice. In 2019, Grandeza Studio directed the Australian pavilion at the XXII Triennale di Milano, which received the Golden Bee award for the best international contribution. His work has been internationally exhibited and published at the Venice Biennale of Architecture, the Triennale di Milano, and the Chilean Biennale of Architecture, amongst others. Between 2015 and 2020, Valiente-Oriol worked as an academic at UTS School of Architecture, where he holds an adjunct honorary position. Valiente-Oriol is currently undertaking a research residency at Medialab Matadero in Madrid.

Amaia Sánchez-Velasco is an architect, educator, researcher, and codirector of Grandeza Studio. Her work has been internationally exhibited and published at the Venice Biennale of Architecture, the Triennale di Milano, and the Chilean Biennale of Architecture, amongst others. Between 2015 and 2022, Sánchez-Velasco worked as an academic at UTS School of Architecture, where she holds an adjunct honorary position. Sánchez-Velasco is also an adjunct faculty member at IE University in Madrid and is currently undertaking a research residency at Medialab Matadero in Madrid.

Gonzalo Valiente Oriol is an architect, educator, researcher, and codirector of Grandeza Studio. His work has been internationally exhibited and published at the Venice Biennale of Architecture, the Triennale di Milano, and the Chilean Biennale of Architecture, amongst others. Since 2014, Valiente-Oriol works as an academic at UTS School of Architecture, where he currently holds an adjunct honorary position.