

The Hand of the Engraver

Ryan Western and Professor Daniel K. Brown
Images by Ryan Western

Abstract

The manner in which we dwell leaves scars upon the landscape that are often left behind long after occupancy ceases. Many derelict landscapes across New Zealand have scars too advanced for remediation. This designed research project proposes that by building upon these scars, rather than ignoring or hiding them, these scars can be reinterpreted as lessons that can help enable future generations to learn from past mistakes. Quartz Reef Point in Central Otago has been selected as the site for this designed research investigation; it is an abandoned strip mine that appears so violated that it has lost all apparent means of restoration or reuse. The damage at Quartz Reef Point strip mine has been caused by 'scratching' the surface of the site so severely that natural systems have suffered inexorable damage. In the art of engraving, the surface of a copper plate is also deeply scratched – and the resulting 'damage' to the plate allows a story to unfold. This investigation looks at how the art of engraving can be applied to architectural design processes in ways that help tell the story of severely damaged sites such as Quartz Reef Point. Hans-Jörg Rheinberger's book *The Hand of the Engraver: Albert Flocon Meets Gaston Bachelard* is used to establish a framework for this investigation. In this book, the architectural engraver

Albert Flocon shares dialogues with the architectural philosopher Gaston Bachelard – two distinct points of view about storytelling. The investigation proposes that when these two points of view are integrated with the voice of the architectural designer, the investigation author, new approaches for meaningful architectural interventions can be discovered to help bring the story of Quartz Reef Point to life for future generations. Using Rheinberger's book *The Hand of the Engraver* as a generative starting point, the investigation asks the research question: How can the engraver, the philosopher and the architectural designer be brought together to explore new ways of looking at scarred landscapes that not only reinvigorate them, but also offer their tales as important lessons for the future?

Introduction

Countless scarred sites scattered across Aotearoa, particularly open-pit mining environments, evidence humanity's unsustainable damage to environmental systems; often the damage is so severe that returning such sites to their original natural state is not economically feasible. This research proposes that future generations

can learn from these sites by strategically incorporating narrative allegorical architectural interventions into scarred landscapes in ways that help provide new opportunities for the site while also enhancing didactic engagement. Jerome Bruner, senior research fellow at New York University, outlines a framework that he argues is necessary to advance a successful fictional narrative. Architectural heritage theorist Jennifer Hill discusses how retaining visible scars in the built environment can offer insights into how the ongoing transformations of a site contribute actively to the narrative of place. Environmental psychologist Jonathan Sime argues that contextual elements of derelict sites, in combination with a fictional narrative, can culminate in an enhanced 'sense of place' through unexpected architectural responses. This investigation integrates the theoretical arguments of Bruner, Hill and Sime in a design-led research approach to the reinvigoration of severely scarred landscapes. Architectural elements and environmental scars are conceptualised as overlapping, each advising the other. In this way, the investigation looks to communicate contextual narratives in a way that not only revitalises place identity, but also enables us to fully engage a site's heritage and learn from past mistakes.

The Allegorical Narrative Framework

In the art of engraving, the surface of a copper plate is deeply scratched, and the resulting 'damage' to the plate allows a story to unfold. This design research investigation looks at how the art of engraving can be applied to architectural design processes in ways that help tell the story of severely damaged sites. The research site is the historic open-pit mining area of Quartz Reef Point in Central Otago, where severe damage has been caused by 'scratching' the surface of the site so severely that natural systems have suffered inexorable damage. Preserving the story of such sites is essential to help enable future generations to learn from past mistakes.

Hans-Jörg Rheinberger's 2016 book *The Hand of the Engraver: Albert Flocon Meets Gaston Bachelard* is used to establish a framework for this investigation. In this book, the architectural engraver Albert Flocon shares dialogues with the architectural philosopher, Gaston Bachelard – two distinct points of view about storytelling. When

added to the voice of the architectural designer, the investigation author, three points of view are represented. The investigation proposes that when these three points of view are integrated, new approaches for meaningful architectural interventions can be discovered that help bring the story of Quartz Reef Point to life for future generations. This design-led research investigation asks: How can the engraver, the philosopher and the architectural designer be brought together to explore new ways of looking at scarred landscapes that not only reinvigorate them, but offer their tales as important lessons for the future?

This investigation examines how, through processes implicating narrative, drawing and making, architecture can be conceived and designed as a multi-layered story to help convey a stronger understanding of place. Through this implication, visitors can be equipped to more fully engage with their surrounding context, achieving a stronger understanding of 'place.' Rosemary Ross Johnston, in her article "Landscape as Palimpsest, Pentimento, Epiphany," argues that our landscapes represent important heritage stories: "stories of the present that may unravel into past, stories not only of now but then, not only of here but there."¹ She proposes that a landscape site is similar to a palimpsest or pentimento, representing a range of stories exposed as layers that unfold as a greater metanarrative of place.

Methodology

The research methodology has a strong emphasis on analysing contextual relationships and identifying critical patterns – strategically building upon temporal patterns of change that are implied by contextual relationships in our built environment and surrounding landscapes. Derived from Albert Flocon's *The Hand of the Engraver*, dry-point engraving is one of the principal tools integrated throughout the methodology as a means of addressing the design-based research objectives. An iterative design approach is used to encourage the incorporation of making and drawing as a means to engage allegorical architectural narrative. Jane Rendell argues that "In much design research the process operates through generative modes, producing works at the outset that may then be reflected upon later."² Peter Downton, in his book *Design Research*, argues that this

1. Rosemary Ross Johnston, "Landscape as Palimpsest, Pentimento, Epiphany: Lucy Maud Montgomery's Interiorisation of the Exterior, Exteriorisation of the Interior," *CREArTA* 5, 1 (2005): 13.

2. Jane Rendell, "A Way with Words: Feminists Writing Architectural Design Research," in *Design Research in Architecture: An Overview*, ed. Professor Murray Fraser (Farnham, UK: Ashgate, 2013), 117.

The Hand of the Engraver / Western and Brown

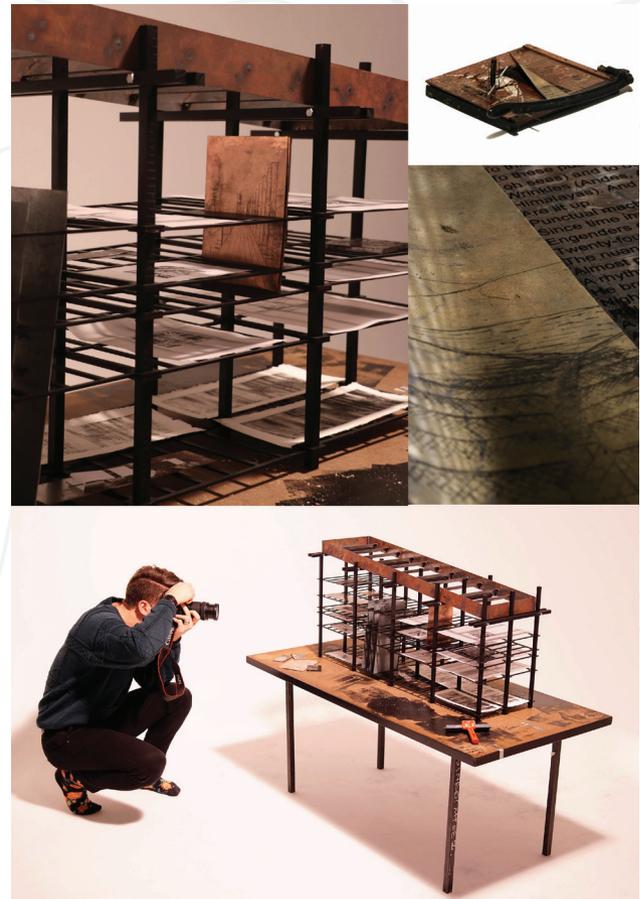
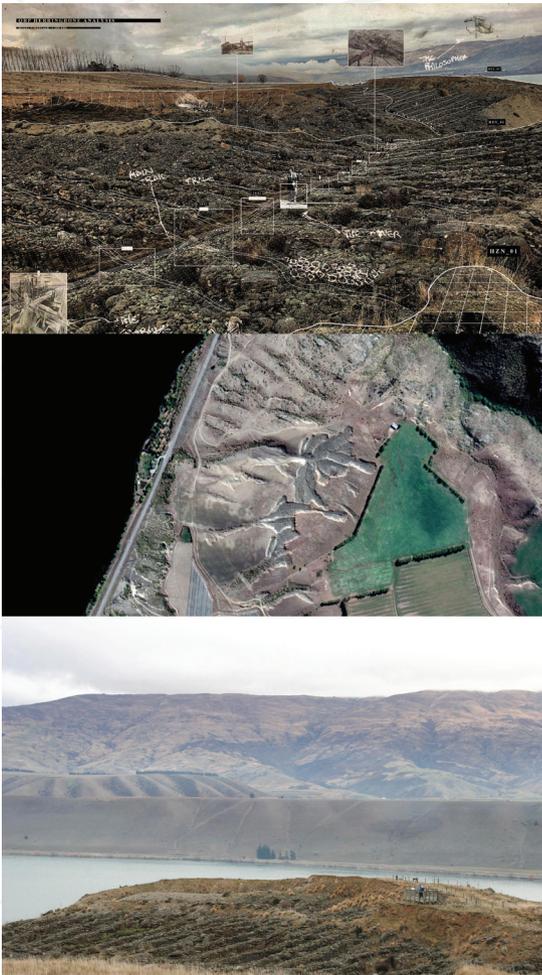


Figure 1. (Left) Quartz Reef Point. Centre image: Google Earth
Figure 2. (Above) Concept-design installation experiment.

approach allows unexpected findings to emerge from the processes, made possible within an iterative framework.

A 'research through design' approach enables the design process to become the research instead of a design 'test' to validate the research.³ This methodology integrates research throughout the design process, using the construction of models, drawings and engravings based on three key themes: narrative, drawing and physical making.

Process

The architectural design research examines how the engraver and the philosopher might dwell together upon and within the deep scratches of Quartz Reef Point (Figure 1). Concept design began with a speculative installation

experiment (Figure 2) representing an architectural translation of a drying rack for engravings. The aim of the process was to progressively cultivate a design where the philosopher and the engraver exchange a dialogue interwoven by the design interventions of the architectural designer, each with a character and point of view that are distinct yet complementing one another.

The engraver inhabits the cracks and scratches within the landscape, embedded in the earth. He/she understands how to bring some scratches to life while inviting others to fade, in order to tell a meaningful tale. The philosopher inhabits and defines the ephemeral realm, the threshold condition. He/she inhabits the liminal zone between the architecture and the engraver's scratches. These personas take on the

3. Peter Downton, *Design Research* (Melbourne: RMIT Publishing, 2003), 75.

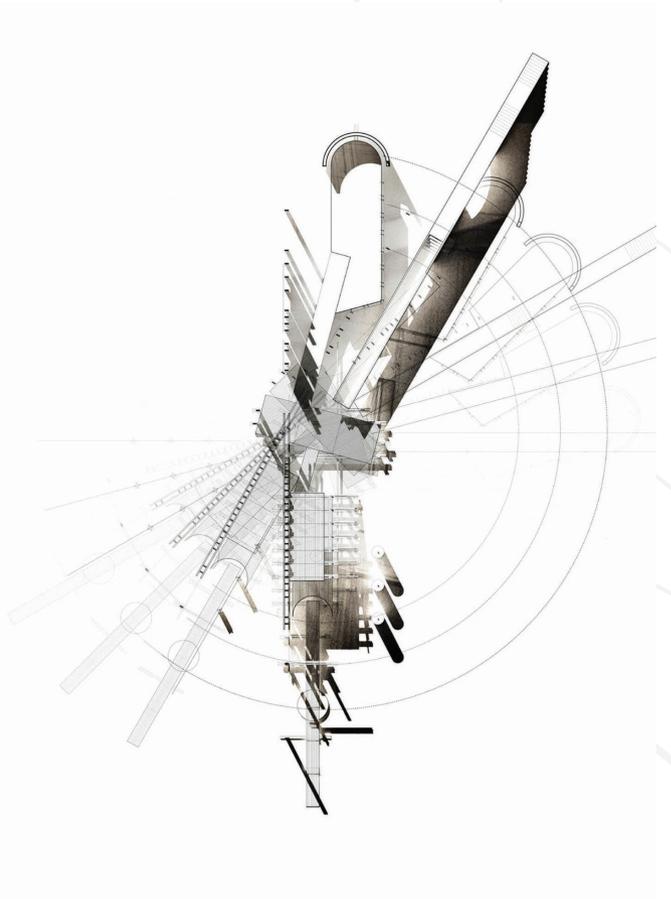


Figure 3. Copper-plate engraving testing dialogues between the philosopher, the engraver and the architectural designer.

dual roles of both context and architectural inhabitant. The design experiments applied and tested different hierarchies and levels of dominance, in combination with materiality and scale, for the narrative personas. They establish strategic framed views and exhibit relationships and dialogues between themselves as architectural inhabitants that might otherwise never be witnessed or understood.

Discussion

The iterative design experiments were referred to as ‘excavations.’ Each design excavation can be viewed as a progressive shift in thinking, in accordance with the non-linear and ‘searching’ nature of the design process. Whilst initial concept schemes do not all fully appear in the final design, they are equally important and relevant to arriving

at the development of the design. As artist Sol Lewitt writes in the article “Paragraphs on Conceptual Art,” “steps – scribbles, sketches, drawings, failed works, models, studies, thoughts, conversation – are of interest. Those that show the thought process of the artist are sometimes more interesting than the final product.”⁴ The author acknowledges that the unusual framework of this research project was replete with obstacles, but failed experiments nevertheless provided important new insights. The research was abductive in nature as well as speculative. Doubts arose at various stages of the process, when trying to interpret the two-dimensional nature of an engraving into the three-dimensional representation of a set of architectural interventions. Similar doubts pervaded when considering how to manifest the distinctly unique voices

4. Sol Lewitt, “Paragraphs on Conceptual Art,” *Artforum* (June 1967): 848.

The Hand of the Engraver / Western and Brown

of the engraver, the philosopher and the architect within the arrangement of 'curated' architectural interventions. It required patience and critical reflection throughout the process, as doubts were eventually assuaged through unexpected experimental outcomes.

Preliminary design experiments were conceived as copper-plate engravings (Figure 3), each building on previous design excavations in relation to a contextual master plan. Programmatic traces began to emerge that address both *The Hand of the Engraver* narrative and the contextual 'scratches' that define Quartz Reef Point.

The developed design scheme (Figure 4) is a physical model that consists of five interrelated interventions: 01) Gateway, 02) Observatory, 03) Vessel, 04) Bridge and 05) Burin (the engraving tool used by engravers to scratch a copper plate). Each of these five allegorical architectural interventions works individually as well as collectively to address the research objectives. This allegorical architectural investigation developed the five architectural interventions as a way that unveils some of the seminal stories that have contributed to the site's identity over time; the five interventions themselves represent the present chapter of the site's ongoing story. Through architectural form, materiality and programme, a narrative-driven response looks to add another chapter to a derelict site, while strengthening and incorporating the fundamental chapters already contributing to its sense of place. These developed design experiments explore how a narrative can be activated in relationship to site: what Rosemary Ross Johnston refers to as "stories of the present that may unravel into past, stories not only of now but then, not only of here but there."⁵ The three personas – the engraver, the philosopher and the architectural designer – become realised through architectural form, materiality and framing devices.

The Tangible and the Intangible

Both tangible and intangible characteristics of the five design research interventions begin to formalise allegorical notions of the engraver, philosopher and the architectural designer with varying degrees of success, as a means of enhancing didactic engagement within the allegorical architectural project. The engraver inhabits the scarred

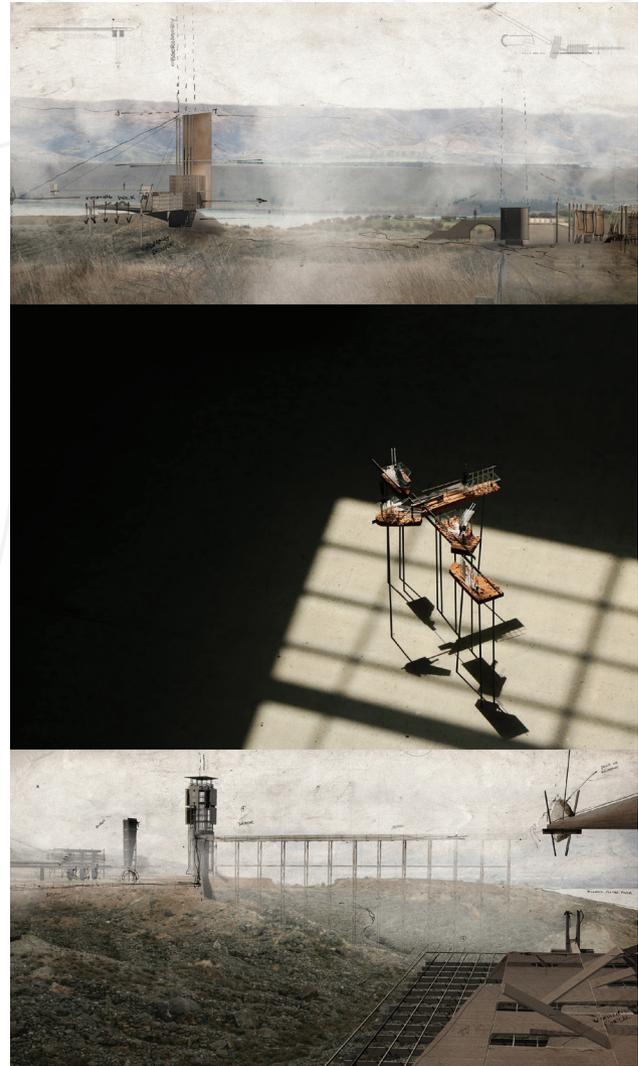


Figure 4. Model and perspectives of developed design scheme.

landscape within architectural foundations as a physical connection with the land. Formal qualities of printing press details are translated into structural elements directly implicating the engraver. The philosopher, who floats above, slightly disengaged from site, provides an additional point of view through framing devices and orientation shifts. The philosopher is also represented as intangible nuances: light, shadow, atmosphere. The architectural designer is realised through the implications of the grid (or ordering device) and the bringing together of the philosopher and the engraver.

5. Johnston, "Landscape as Palimpsest, Pentimento, Epiphany," 13.

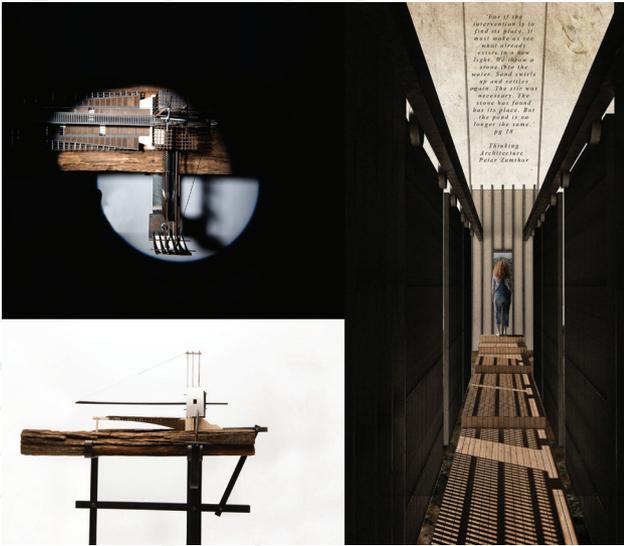


Figure 5. Observatory intervention.

The final design incorporates both Diachronicity and Hermeneutic Composability from Jerome Bruner's narrative criteria.⁶ Through the refinement of a master plan, (architectural) parts are composed in a way that can be interpreted as a whole. By looking at each building individually, a greater, overall metanarrative is revealed. The developed design uses a parallel fictional narrative to establish a speculative design driver. From this fictional narrative, in conjunction with the unique stories relating to this derelict site, a rich and multi-layered sense and understanding of place begins to be awakened. Forms and characteristics draw from both the earlier design excavations and printing press details, translating design outcomes and aligning them with an allegorical and narrative character of locality. The developed design confronts an increasingly relevant issue for Quartz Reef Point and similar sites across Aotearoa. The five interventions reappraise Quartz Reef Point, reframing the way damaged and derelict sites are viewed. The architectural interventions do not attempt to 'fix' or 'right the wrongs' evident at Quartz Reef Point. Rather, in alignment with Bruner's Normativeness criterion, the scheme allows the place to be witnessed in a manner that values past events, in order for lessons to be learnt by future generations (a consoling of the plot). In this way, narrative architecture highlights and encourages

discourse surrounding the environmental impacts of mining sites such as Quartz Reef Point.

The Observatory

As an important final phase of this design-led research, the Observatory architecture was developed in greater detail (Figure 5). The manner in which the Observatory is composed allows the tangible and intangible characteristics of place to manifest and establish a didactic architectural outcome. To dwell within this architectural intervention, the story of place is presented in a new light, as Zumthor describes in his book *Thinking Architecture*: "For if the intervention is to find its place, it must make us see what already exists in a new light. We throw a stone into the water. Sand swirls up and settles again. The stir was necessary. The stone has found its place. But the pond is no longer the same."⁷

One axis of the Observatory showcases the cause of the site's physical erosion, using a framing device on axis with John Bull Creek to the north, which was the source of the water-fuelled mining. On the opposing axis, the effect of the erosion is showcased, depicting the vast scene of land erosion and mineral depletion. The further through the Observatory one progresses, the more the impact of the sluice mining can be seen – a stark narrative of cause and effect. The viewing deck tells this story of place at a detailed scale with framed observation portals that continue down to the scarred landscape below.

A highly pitted and eroded railway sleeper represents the scarred site. To fully understand the physical model, the viewer must physically engage with it, kneeling to view the refined underbelly of the sleeper and touching the rough and smooth surfaces of the timber. Ephemeral qualities begin to draw parallels to uncanny characteristics found within Quartz Reef Point. The installation model encapsulates a 'presence' when experienced as an object in space. Peter Zumthor begins to unpack this concept by arguing that, "there is an intimate relationship between our emotions and the things around us."⁸

The speculative design of the Observatory was conceived to enter into a narrative dialogue with its environment.

6. Jerome Bruner, "The Narrative Construction of Reality," *Critical Inquiry* 18, 1 (Autumn 1991): 6–11.

7. Peter Zumthor, *Thinking Architecture*, 2nd expanded ed. (Basel, Switzerland: Birkäuser, 2006), 18.

8. *Ibid.*, 85.

The Hand of the Engraver / Western and Brown

Designing as a means of investigating the philosopher, the engraver and the architectural designer meant that the developed design outcome takes on anthropomorphic qualities. As Zumthor writes, “Buildings are bodies and need to be built accordingly: as anatomy and skin, as mass and membrane, as fabric, shell, velvet, silk, and glossy steel.”⁹ The narrative methodology proved useful in linking architectural form and the physical place of Quartz Reef Point. Understanding the foundational pieces as the engraver scratching at the top surface of the copper plate translates into contextual issues that represent the site’s story. Tracing the centre line of the site’s herringbone pattern (scars), the architecture itself becomes an active participant in the story of place, fundamentally tied to the landscape. The Observatory draws formal vocabulary from both the initial installation model and formal details derived from printing presses, as a means to develop an architectural response to the idiosyncratic nature of the deep scratches that now define Quartz Reef Point. This language is used to engage print and place-making within the final design excavation.

Conclusion

For this allegorical architectural research investigation, a literary context was tested as a way to help a derelict site come to life and share its story about place identity for future generations. *The Hand of the Engraver* was engaged as a generator for the narrative thread within the research methodology. Three seminal theorists, Jerome Bruner, Jennifer Hill and Jonathan Sim – along with related case studies – contributed to the research’s iterative series of ‘design excavations.’ The first design excavations initiated the research process, in particular showcasing the benefits of ‘making’ as a research method and producing early works that are reflected upon later. Whilst not contextually sited, these initial conceptual design experiments helped to establish a vocabulary of place that was built upon further in following design work.

Throughout the design excavations, there was an aspiration to arrive at a synergy between landscape and architecture. The final developed outcome is a master plan of five intimately related interventions that work together within the master plan to tell the story of Quartz Reef Point.

Engraving is used as an allegory for scarred and damaged New Zealand landscapes and the irreversible nature of some of humankind’s most devastating encroachments on the natural environment. The final scheme works to bring a ‘dead’ place back to life by evidencing the most important stories of its ever-transforming place identity through narrative architectural design.

A series of discoveries was made throughout the course of the design research. Perhaps most potent was the role of design when interrogating the narratives of place that remain alive, even beneath a landscape that appears to be beyond repair. Neither the physical nor the intangible characteristics that contribute to the greater story of a place could have been as fully brought to life again if not for the role of design, particularly through the narrative capacities of drawing and making as principal strands of the methodology. In conjunction with this, the importance of unveiling the multiple chapters of the site’s story, as a driver for an allegorical architectural project, was central throughout the design process. The richness and authenticity that intangible characteristics can bring to architecture can be seen throughout this design research, from the early installation model, through to the contextualised final scheme.

The research addresses scarred landscapes within the context of an abandoned New Zealand mining site. Were the investigation to proceed further, there are opportunities to explore other forms of derelict and abandoned landscapes and the scratches they leave behind. Due to the multi-disciplinary nature of this design-led investigation, and the speculative character of the design outcomes, the findings suggest applications that extend beyond the scope and initial research objectives. This series of design excavations arrived at one speculative, alternative way to occupy and bear witness to the Quartz Reef Point landscape. In doing so through architectural design, the often-inharmonious relationship between people and untouched places is highlighted. Within the context of this investigation, an allegorical architectural project was excavated and interrogated, to help us to better see the world, understand, and hopefully learn from, humankind’s relationship to place identity.

9. Ibid, 86.

Authors

Ryan Western

Ryan Western is an architectural graduate from Victoria University of Wellington, where he gained both his Bachelor of Architectural Studies and Master of Architecture (Professional) degrees. Ryan has a passion for the relationship between vivid Aotearoa landscapes, the intrinsic stories they hold, and the architecture that sits within.

<https://orcid.org/0000-0002-6465-114X>

Professor Daniel K. Brown

Daniel K. Brown is a registered architect and holds the interdisciplinary chair Professor of Design Studio at Victoria University of Wellington, New Zealand. His research investigates allegorical architecture – design as storytelling, situating architecture into the realm of social and cultural activism. Prior to entering academia, Brown was Vice-President of Emilio Ambasz and Associates in New York. He has been awarded numerous international research fellowships including the Fulbright, as well as twelve teaching awards including the New Zealand National Award for Sustained Excellence in Tertiary Teaching.

<https://orcid.org/0000-0001-7653-8075>

Bibliography

Bruner, Jerome. “The Narrative Construction of Reality.” *Critical Inquiry* 18, no. 1 (Autumn 1991): 1–21.

Downton, Peter. *Design Research*. Melbourne: RMIT Publishing, 2003.

Johnston, Rosemary Ross. “Landscape as Palimpsest, Pentimento, Epiphany: Lucy Maud Montgomery’s Interiorisation of the Exterior, Exteriorisation of the Interior.” *CREArTA* 5, no.1 (2005): 4–22.

Lewitt, Sol. “Paragraphs on Conceptual Art.” *Artforum* (June 1967): 848.

Rendell, Jane. “A Way with Words: Feminists Writing Architectural Design Research.” In *Design Research in Architecture: An Overview*, edited by Professor Murray Fraser, 117–36. Farnham, UK: Ashgate, 2013.

Rheinberger, Hans-Jörg. *The Hand of the Engraver: Albert Flocon Meets Gaston Bachelard*. Translated by Kate Struge. New York: State University of New York Press, 2018.

Zumthor, Peter. *Thinking Architecture*. 2nd expanded ed. Basel, Switzerland: Birkäuser, 2006.