

# Overtourism and Colonisation in Tongariro National Park

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On a busy day 3,500 people jostle along the track that winds its way over the craters and ridges of the Tongariro Alpine Crossing in the centre of the North Island of Aotearoa New Zealand. The influx of people who undertake this one-day walk has brought the need for infrastructure to protect the mountain landscape from the sheer number of people that use it and from their detrimental effects on the maunga (mountain). Rubbish and human waste have littered the track in the past. New and expanding developments implemented by the Department of Conservation (DoC) are required as the overtouristed track explodes in popularity and struggles with the volume of sightseers and reservationists.

Alongside the problem of overtourism, colonial processes have undermined the mana (prestige) of local iwi (tribes) and continue to limit their role as kaitiaki (guardians) of the maunga. Te Heuheu Tūkino IV Horonuku, paramount chief of Ngāti Tūwharetoa, gifted the nucleus of Tongariro National Park to the Crown. Since the Crown accepted this gift, the government has, until recently, run the park on its own without consultation with Ngāti Tūwharetoa. In recent years, the park management has been working with iwi to deliver a representative strategy; however, much of the infrastructure and track layout was established before this time and is not fully representative of Ngāti Tūwharetoa values and ideals for the region.

This paper explores two related questions:

How might architecture play a role in helping to address the impacts of colonisation and overtourism in Aotearoa New Zealand's national parks?

How might this architecture inform and evoke a sense of Māori landscape in these sites of significance for Māori?

Tongariro, in particular the Tongariro crossing, is the case study used here. This project has been developed as part of a Master in Architecture, Professional Practice.

## Methodology

The research uses a 'design research' methodology where 'the process operates through generative modes, producing works at the outset that may then be reflected on later' (Rendell, 2013). Also described as an 'inquiry by design' (Zeisel, 2006) approach, it centres design as a tool for illuminating key problems, through iterations, alongside developing solutions for those problems.

As part of a data gathering and testing process, nine interviews were carried out with key Tongariro stakeholders including DoC, outdoor education providers, Ruapehu Alpine Lifts and a Māori planner. These interviewees were chosen to

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## KEY WORDS

*Tongariro National Park*

*Overtourism*

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*Decolonisation*

## RESEARCH

represent a range of views from groups that use and value the mountain, each with different roles, insights and needs from the mountain. Given the already noted kaitiaki role of Ngāti Tūwharetoa, the project included much effort to identify and interview iwi representatives. However, given iwi representatives and officers receive many requests for comments and invitations to be involved in issues of concern for the iwi, engaging iwi representatives in the project proved difficult. As researchers, we felt it more ethical to stop pursuing iwi for further involvement so as not to put further strain on their resource. While not seeing it as a replacement for direct iwi voices, we worked extensively to research and gather background information from Waitangi Tribunal documents from the Ngāti Tūwharetoa settlement and other iwi resources so that we could, as much as possible, include their voice in this student project.

Any writing on Māori landscapes requires those undertaking it to acknowledge their own positionality. This paper is led by Ben Carpenter, a Pākehā architecture researcher. Rebecca Kiddle is Ngāti Porou and Ngāpuhi and a researcher focused on issues of place and decolonisation. Mark Southcombe is a Pākehā architect with research focused on design-led research and collective housing practices. We are cognisant that none of us is Ngāti Tūwharetoa and so we speak from an etic perspective with respect to this particular Māori landscape.

### **The sacred ‘gift’ – a koha for Aotearoa**

Many New Zealanders have visited the park, and many know the history of Te Heuheu Tūkino Horonoku’s gift to the Crown in 1887 for all New Zealanders. The current Tongariro National Park Management Plan explains: ‘it was unique in that its nucleus was the gift of an indigenous people. Thus, a major new dimension was added to the national park ideal with the gift of the sacred volcanic summits creating a three-way bond between land, Māori and Pākehā’ (Department of Conservation, 2006).

In Ngāti Tūwharetoa’s view, the gifting of the peaks ‘imposed reciprocal obligations and conditions on the Crown’ (Waitangi Tribunal, 2013). There would be a partnership to care for the maunga and both Ngāti Tūwharetoa and the Crown would hold the title (ibid). The gift did, however, come with strings attached, contrary to the view of then Native Minister John Ballance, who saw them as an English-style gift. In reality, the gift was an offer of partnership, in which Queen Victoria was joint trustee. Generally until recently, one result of this lack of a shared understanding around the nature of a koha or gift has been that the Crown has believed it has sole responsibility for the park. Even today, although DoC consults and negotiates with hapū (the local subtribe) over infrastructure changes, it still has the final say as to what happens in regard to the crossing.

In 1993, Tongariro became the first World Heritage site to be inscribed on the heritage list for natural and cultural World Heritage status. Tongariro is ‘directly and tangibly associated with events, living traditions, ideas, and beliefs of universal significance and is representative of the culture of Ngāti Tūwharetoa’ (Department of Conservation, 2006).

### ***Overtourism in Aotearoa***

In a 2019 report, the Parliamentary Commissioner for the Environment highlighted that each year Aotearoa had 4 million international visitors and the number

could rise to 10–13 million annually by 2050 (Parliamentary Commissioner for the Environment, 2019). The report looked at the effects of the sheer number of tourists within Aotearoa, which is eroding the image of the pristine, tranquil environment that draws people to our shores.

Our own research found that a ‘more of the same’ (ibid) approach would have an adverse outcome on areas like the Tongariro crossing. For Tongariro specifically, interviewees suggested that 750 visitors per day was the maximum that the track could handle before it became overcrowded. Today, numbers of 3,500 are seen on the busiest days of the year and the track becomes a single-file line of visitors through some sections (figure 1).

To reduce visitor impact, DoC has hardened the track surface over most of the crossing to protect against erosion. Toilets have been installed at three-hour intervals of walking to reduce defecation in the environment and new information displays alert visitors to the need for adequate clothing and water. Despite these efforts, anti-environmental behaviours – such as littering, defecating and displacing rocks – still occur. As visitor numbers increase, the high volume of people on the track compounds their effect on it.

### *The uncanny opportunity of the pandemic*

By March 2020, Covid-19 was spreading around the world, becoming a global pandemic. As countries were crippled by the virus, and global travel and tourism ground to a halt, Aotearoa shut its borders to all non-residents to try to protect itself from the pandemic (Cooke, 2020). Some called for a rethink of how to envision the country’s tourism economy (Fyfe, 2020). Strains on infrastructure and congestion of tourists, particularly in conservation areas, were highlighted as unsustainable. With only the domestic market available, the pandemic opened up the opportunity to explore and create more carbon-neutral and less intensive tourism models to follow when the world borders began to open again (Littlewood, 2020).

The Crown’s recent acknowledgement of the need to partner with Ngāti Tūwharetoa over management of the maunga, the ongoing impact of overtourism and the opportunity to rethink the tourism sector that Covid-19 indirectly brought about provided the backdrop for this study. Against this, we explored the issues



*Figure 1: Visitors descending from Red Crater, the highest point on the Tongariro Alpine Crossing. (Photo: Ben Carpenter.)*

of overtourism, the promotion of Māori landscapes – in this case, those of Ngāti Tūwharetoa in particular – and the role architecture might play in provoking visitors to rethink and reassess their relationships with the whenua which they have come to draw enjoyment from.

### Dealing with overtourism

The interviews reinforced that the Tongariro Alpine Crossing is a fragile environment and that great care is needed to help it withstand the pressure of the huge number of people completing the trail every day. Interviewees were split between whether to limit numbers on the track or to keep the numbers high solely on the crossing as a way of preventing overcrowding elsewhere.

One of the easiest ways to control numbers would be to use a USA-style permit system. Under this system, prospective walkers would apply for a permit to walk on a chosen day and a cap on the number would be set at an environmentally sustainable level.

One of the interviewees, Shaun Barnett (author of *Tramping: A New Zealand History*, Federated Mountain Clubs), noted, however, that while the Tongariro track was overcrowded, its popularity eased the pressure on the rest of the park and allowed the Round the Mountain track that encircles Ruapehu to stay comparatively quiet and free from the impact of overtourism. If the number using the crossing was capped, this could channel tourists into the low-use parts of the park, moving the problem elsewhere.

It is unlikely that a permit system would be popular with New Zealanders as free access to our national parks seems to be part of a New Zealand identity, held as a cherished right. A backlash on a similar issue was evident when DoC introduced four-hour limits to the Mangatepōpō car park, leading trampers to complain about DoC's ability to cut off access on its own terms (Rangi, 2017). In addition, the extra layer of bureaucracy gives those who are more aware of the system a higher chance of obtaining permits, at the expense of first-time users. Overseas tourists could also take up permit spots, excluding New Zealanders from their own national parks.

Given the problems inherent in a permit system, this project developed an alternative response to deal with overtourism on the Tongariro crossing. This response focused on better educating those walking the crossing so that they have an opportunity to teach or be taught and 'listen' to the culture and ecology that already surrounds users. We thought this was a more democratic response to the use of a place that is important to iwi, New Zealanders and international visitors alike. Another important element of the response, though, is to give added weight to the values and identity of Māori as a way of acknowledging the importance of the maunga for Ngāti Tūwharetoa and promoting better relationships with and respect for the maunga from tourists.

As stated in the iwi's environmental management plan, 'As kaitiaki, ngā hapū o Ngāti Tūwharetoa have an intrinsic duty to ensure that the mauri [life force] and therefore the physical and spiritual health of the environment is maintained, protected and enhanced' (Ngāti Tūwharetoa Māori Trust Board, 2002). Reducing the impacts of overtourism through an educational model was explored as a way of maintaining the mauri and physical and spiritual health of the mountain.

To promote this respect among all visitors and a more careful interaction with the maunga, we decided on a strategy that encouraged self-policing while also providing educational opportunities. This model encourages social learning and incentivises genuine social connection between different tramping parties. Anecdotal evidence suggests that social connections between parties and strangers are more likely to happen on less popular tracks where the number of users is small enough that it is worth investing time in conversing with others because the chance of seeing them again is high. This situation, where users are likely to recognise each other if they meet again elsewhere in the journey, creates a sort of social accountability. In contrast, on the Tongariro crossing, where the number of users is so high and the structure of the walk is for one day only, most users will never speak to another person outside their party and therefore they feel less accountable to other users.

Currently educational strategies in settings like this take a few forms. The most direct option is to locate information signs throughout the track that tell visitors about their responsibilities. This conveys information directly but does not necessarily create the visceral response or cognitive dissonance required for visitors to gain a sense of ongoing accountability to meet those responsibilities. If a strategy is to create a positive attitude change or reinforce existing positive behaviours, it needs to evoke a deep-seated response in visitors so that they actually follow through. This is particularly true for overseas visitors who are unlikely to know the value of tikanga (Māori protocol).

To create a meaningful change in attitude away from visitors' current disregard for the maunga, there must be a shared sense of social accountability. In the same way that a sign has no moral directive, visitors will be more inclined to follow behaviours that benefit the environment and the mana of the maunga when they have a shared responsibility created by social learning opportunities (Bandura et al, 1961) and feel part of a wider group with shared interests and goals. Benedict Anderson's (1983) notion of 'imagined community' is useful here: it suggests that when we feel part of a community (even if a large one, such as a community of New Zealanders), we are more likely to feel a sense of responsibility to that community without necessarily knowing all of its members. Wokje Abrahamse's (2019) study on social norms also tells us that when the actions of some people make these norms salient, others are much more likely to follow them.

Currently, the physical infrastructure of the Tongariro crossing, including the buildings and structures on the maunga, provides little opportunity for learning; nor does it help to create a sense of place. DoC tends to use the same building design for its structures over most of Aotearoa, so the architecture and infrastructure are generally not context specific. We assert that architecture has an important role to play in representing the rich history and landscape of Tongariro National Park and in reasserting the Māori landscape that this place represents.

### An architectural response

The aim of this scheme is to provide an extended journey along the mountain that gives users more opportunity to socialise, learn and reflect on their maunga context, the histories of that place and their accountabilities within it (figure 2).

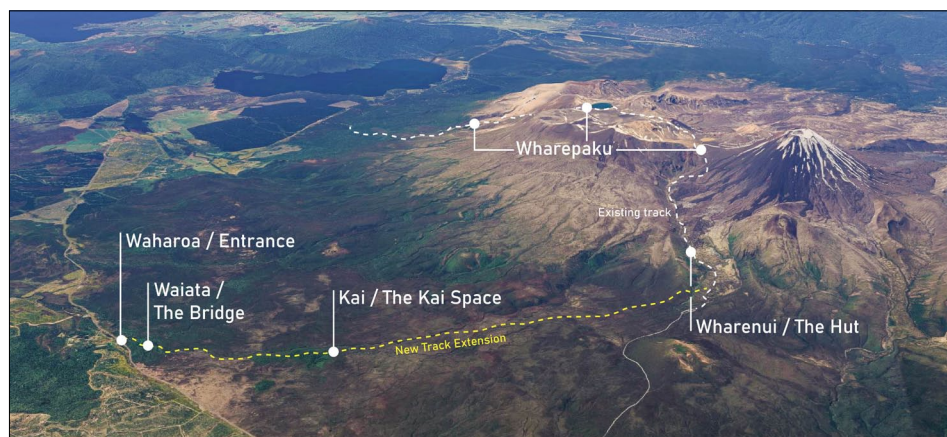


While we acknowledge that architecture is not deterministic of people's behaviour, we contend that it does have some role to play in reasserting identities lost, capturing imaginations and nudging people towards behaviours that are positive for the whenua. That is, architecture can contribute to decolonisation and better visitor behaviours. Alongside these physical interventions, we acknowledge the role that iwi and hapū, as mana whenua of this place (with customary authority over the land), need to play in the ongoing processes that govern the management and control of the park. Fulfilling that role requires structural change.

The scheme is modelled on a pōwhiri (welcome), with each design intervention corresponding to a stage in the pōwhiri process. The pōwhiri was chosen to acknowledge the koha of the maunga to the people of Aotearoa, showcasing the manaakitanga (generosity and hospitality) and welcoming inherent in that koha.

### *Waharoa | Entrance*

The entrance is an opportunity to prepare for the walk ahead. It offers a gathering place where groups share their knowledge with each other on how to plan, how to prepare and how to look after the mountain (figures 3 and 4). The design is predicated on the idea of the architecture becoming a vessel for this knowledge, providing opportunities to linger and transfer it between the groups to create the social accountability needed to protect the whenua. This is akin to the waharoa at



*Figure 2: Location of proposed infrastructure along the track. (Image: Ben Carpenter. Map data: Google. Imagery: TerraMetrics.)*



*Figure 3: The waharoa during rainfall. Water falls through the oculus into the central crucible, where visitors can use it as drinking water. (Image: Ben Carpenter.)*

which, before the pōwhiri starts, a certain amount of discussion and negotiations occurs. Who will do the karanga (welcome call)? Who will be the kaikōrero (speaker)? What waiata (song) will we sing? Has anybody got an envelope to collect the koha (offering) for the marae? Providing space for preparatory discussions builds accountability across groups. As people travel forward on their journey, the walk to the next intervention represents the karanga and the whaikōrero (speech) that continue to welcome people to this place.

### *Waiata | The bridge*

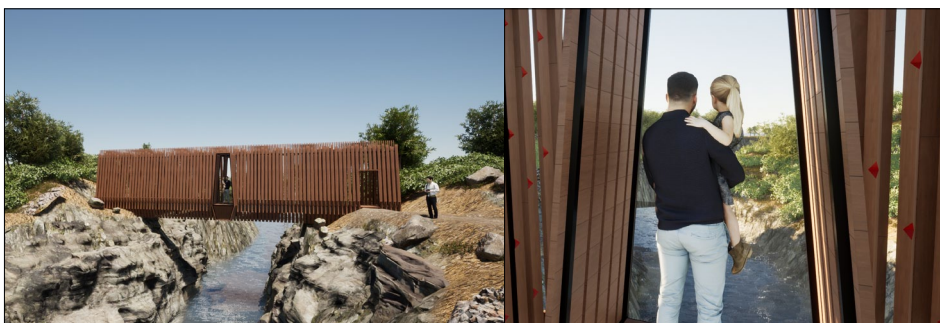
The bridge represents the kīnaki or the relish to the whaikōrero inherent in the waiata of the waters that pass under it. The bridge provides a quiet moment of reflection after the hubbub of the kōrero that has just taken place. With all the bustle and awe involved in being in the mountains and starting out on the journey, reflection on your place and what you are going to be doing is often not given much importance. The bridge sits in contrast to the nature around and provides a place not just to move through along the journey but to sit and listen to the awa (river) with the hope of provoking cognitive dissonance, a shift in thinking in those who arrive (figures 5a and 5b).

### *Kai | The kai space*

The final act of the pōwhiri process is to eat in order to make noa (profane) those who have arrived, moving them from waewae tapu (sacred feet) to being part of and accountable to this place. The kai space is the first opportunity for the different parties to come together and share food. This gathering around



*Figure 4: Areas for groups to share knowledge and transfer it between parties. (Image: Ben Carpenter.)*



*Figures 5a and 5b: The bridge over the Mangatepōpō. (Images: Ben Carpenter.)*



the shared space can create social bonds between the different parties. The architecture also confines users to a particular space so they do not impact negatively on the surrounding whenua (figure 6).

### *Wharenui | The hut*

Sleeping communally in the wharenui extends and reinforces a shared sense of accountability to each other and the maunga. The larger huts that are typical on the great walks of Aotearoa have been shrunk here into two smaller huts, sleeping 14 people each so that they bring people together for a closer-knit experience (figure 7). The choice of 14 as the maximum number is drawn from the outdoor education industry. Kurt Hahn – the founder of Outward Bound who shaped the outdoor education industry – used watches (limited groups) of up to 14 (Veevers and Allison, 2011). According to Hahn, at numbers above 14, it is difficult for each person in the group to meet everyone else personally and it encourages the feeling of being one of the crowd.

The smaller huts are designed to spark conversation and social accountability as they rely on hut users having mutual respect for each other. The routed interior takes its inspiration from the rocks and volcanic activity of the Mangatepōpō landscape and the forces of creation that produced the landscape. The curved flowing of the bunks, cubbies and benches breaks down the traditional use of ‘my bunk, my shelf, my cubby-hole’. Instead, the collective sharing of space forces people to work together and communicate to give a sense of group ownership: ‘our shelf, our kitchen bench’. This is not a solution to all the problems people have in communal living – piles of gear and food are a common one – but shared spaces and small numbers of visitors allow accountability of behaviour in a communal environment.



*Figure 6: A place of kai, drawing people together to create social connection and keep them away from the fragile whenua.*

*(Image: Ben Carpenter.)*



*Figure 7: View from Mangatepōpō Stream. The poled huts minimise the area of landscape that they disrupt.*

*(Image: Ben Carpenter.)*



### *Wharepaku | Toilets*

The pragmatics of human living mean providing ablution facilities is important to protect the wider maunga landscape. Defecation on the mountain was a big issue before DoC placed toilets along the Tongariro Alpine Crossing (Blaschke and Pauline, 2007, p vii). These toilets were implemented following consultation and were printed with images of the surrounding landscape. The architectural language of the toilets when seen as a landmark from the alpine areas was underdeveloped and groups would often stop and eat while waiting for their party to use the facilities, mixing tapu and noa activities. This project's proposal to separate the two activities would advance Ngāti Tūwharetoa's aims of protecting the mauri of water and prohibiting all discharge of human waste directly into waterways (Ngāti Tūwharetoa Māori Trust Board, 2002).

Volcanic activity, particularly after the eruption of Te Mari, has also highlighted the ongoing danger of this volcanic landscape. The new designs add a steel framework around the wharepaku. One reason for doing so is to blend the design into the surrounding landscape and separate tapu and noa activities (figure 8), but another is to provide suitable shelter if the volcano erupts. The Corten steel structure took inspiration from the volcanic landscape features (figure 9).

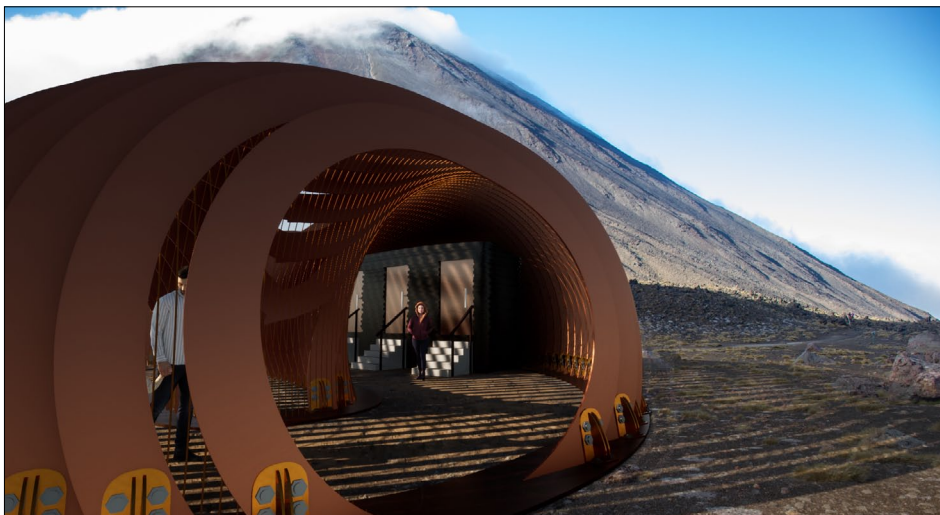
### *Poroporoaki | Farewell*

The poroporoaki is a time of farewell, where those who are leaving the space farewell their hosts and discuss and reflect on the time shared. As people wait for their buses to arrive, they have time for parting words to share with those who they have journeyed with.



*Figure 8: The wharepaku unit sits on the surface so no digging on the maunga is required.*

*(Image: Ben Carpenter.)*



*Figure 9: The Corten steel and organic shape blend in with the volcanic environment.*

*(Image: Ben Carpenter.)*

The structure is almost identical to the waharoa | entrance, with the same details symbolising a circular process that occurs on a linear track (figure 10). The centre of the structure is now a space for people, the architecture inviting a space for discourse between parties and a place for them to reflect on the landscape they have travelled through and the knowledge they have gained along the way.

## Conclusion

The project described in this paper is a response to overtourism through architecture that provokes us to rethink our relationship with the whenua. It has also attempted to reassert the identity of Tongariro as a Māori landscape. The research highlights how architecture can play a role in re-orienting visitor thinking through creating opportunities for social learning and cognitive dissonance. It demonstrates that design interventions and their associated rituals and patterns of use can facilitate a sense of a wider accountability to those around us and to the whenua on which we walk. This culturally and ethically based change in the tourist experience would help contextualise and mitigate current problems with overtourism in Tongariro National Park.

Alongside this, in order to fully recognise the kaitiaki role of Ngāti Tūwharetoa, further work is needed to enhance iwi oversight and management for the maunga. Recent efforts that are forging a new precedent to give due mana to both the unique landscape itself and the local iwi who belong to that landscape have seen the personhood of the landscape acknowledged by enshrining it in legislation – Te Urewera Act 2014 for the area of Te Urewera and Te Awa Tupua (Whanganui River Claims Settlement) Act 2017 for the Whanganui River. Ultimately, for all of us to be good kaitiaki of Tongariro Alpine Crossing, as a unique Māori landscape and tipuna (ancestor), we must work towards preventing overtourism from negatively impacting on the maunga and engage in arguing for management systems that serve to decolonise all precious taonga that are our Māori landscapes.



*Figure 10: The form of the poroporoaki structure facilitates interaction. The design references the waharoa | entrance. (Image: Ben Carpenter.)*

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