

ANALOGOUS STRUCTURES: THE SPIDER'S WEB AND THE RE-DEVELOPMENT OF RUAKURI CAVE

- John Ash

Introduction

History has it that the eighth Robert de Bruce of Scotland fled from Edward the First to hide as a fugitive on the remote island of Rathlin off the north Irish coast. It was during this period, with his fortunes at a low ebb, that he is supposed to have derived hope and patience from watching a spider perseveringly weaving its web.

At this time of the year as one quietly floats out of the Okohua Stream resurgence of Ruakuri Cave (Waitomo, New Zealand) one notes the shimmering webs of orb web spiders traced across the sunlit greens and blues of a crisp clear autumn afternoon. There is time to marvel, reflect upon history and to ponder the fourteen-year re-development plans for the original tourist sections of the cave. Is there a message of 'hope' and 'patience' in the silky symmetry of these webs?

With a little poetic licence, let us take a closer look at the steps taken to produce this 'perfect and characteristic snare' and compare them to the Ruakuri re-development process.

"Begin at the beginning,' the king said gravely, 'and go till you come to the end; then stop'" (Lewis Carroll)

Historical Background

Ruakuri Cave was certainly known to the local Waitomo Maori long before European ventured into the area in the late 1800's. It had a history of use, primarily as a burial ground and a place to store taonga (items of value). In 1904, a part-Maori settler, James Holden, took up a ballot block of land that included the cave.

He proceeded to explore it and contacted the government Tourist Department (who that same year had purchased the Glowworm Cave under the Scenery Preservation Act) saying that he would make improvements that would allow tourists to visit the cave. The burial cave would not be desecrated.

James Holden was conscious of the government's act of taking over ownership of the Glowworm Cave and did not want to invest a lot of time and effort only to have the same happen. For two years he operated tours until in 1906 the government acquired the cave under the Scenery Preservation Act. He asked for, and received, payment of \$196 for the improvements he had made. The Tourist Department operated Ruakuri (along with the Glowworm Cave and Aranui Cave) until 1957 when it was passed over to the Tourist Hotel Corporation of New Zealand (THC).

In 1985, whilst engaged in some land negotiations with the THC, James Holden's grandson searched land titles and plans and discovered that their family probably still owned a major portion of Ruakuri Cave. They felt that the cave was being neglected and used as an "add-on attraction" rather than something special in its own right. They felt strongly that the resource was significant and could be developed into a major attraction competing with, and complimenting, the world-famous Glowworm Cave.

The first thread – is tethered to a suitable anchor point, the vision of the finished web is clear and now, by wind-assisted chance or tenacious traversing, our spider moves toward securing a second anchor.



For two years they attempted to negotiate with the THC until finally, on Waitangi Day, 6 February 1988, they placed a trespass notice on the approximate underground legal boundary of their land. The Tourist Hotel Corporation closed Ruakuri Cave along with the neighbouring Aranui Cave.

In 1990 the THC was sold to the Southern Pacific Hotel Corporation and the Department of Conservation (DOC) took full control of the Ruakuri Bush Scenic Reserve. DOC shared the Holden's vision and saw the re-opening and re-development of Ruakuri Cave as having the potential to take pressure off the over-crowded Glowworm Cave. In 1991 they confirmed the Holden's ownership of the resource.

In that same year the Ruapuha Uekaha Hapu Trust (a local Maori organisation) advised the Historic Places Trust that they thought the existing tourist cave entrance was significant enough to be declared a waahi tapu or sacred burial site. That could preclude access by tourists to the cave via that entrance.

1993 found DOC and the Holden family in a process of consultation and negotiation with local Maori Hapu and Iwi. For a while these negotiations looked extremely promising and it seemed possible that there might be a way to use the entrance without compromising the integrity of that area. DOC was in the difficult position of being the acknowledged land manager, but also having a mandate to pay effect to the Treaty of Waitangi. In doing so, they had to acknowledge and respect the will of the Maori people and their desire to reach a universal consensus. The negotiations eventually broke down and the entrance was declared to be closed to public access.

In the latter part of 1993 a large New Zealand tourism operator, The Helicopter Line, in conjunction with the Maori Development Corporation, showed interest in looking at creative ways to access the cave by another route. This would allow the old tourist sections to be re-opened and quite possibly the development of other sections of the cave.

Plans were drawn up, meetings were held and many negotiating chairs were warmed. Progress seemed to be slow. By 1995 the Ruakuri project was in a 'holding pattern'. Near the end of 1995, the Helicopter Line – now Tourism Holdings Ltd (THL). – announced that they were buying the THC leases for the Glowworm and Aranui Caves from the Southern Pacific Hotel Corporation

and taking over their operation. By 1996 the Maori Development Corporation was experiencing difficulties and undergoing restructuring and Tourism Holdings Ltd. decided to go it alone with regard to Ruakuri. Time ticked by and in 1997 the Holdens gave THL a deadline to get the operation up and running. They didn't. Interest seemed to have waned.

Finally our spider manages to secure another anchor and a slender thread links the two.

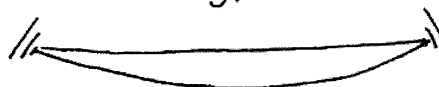
2.



Later in that year a new consortium of Mike Tamaki and Mike Gibbons, of the Rotorua-based Tamaki Tours, and Lyndsay Wyeth of Roselands Restaurant in Waitomo approached the Holdens with a proposal to take the venture over. Local connections and local input made this to be a very attractive and exciting turn of events. As things would transpire, both Mike Tamaki and Lyndsay Wyeth found that circumstances necessitated that they withdraw from the initiative. That left Mike Gibbons as the sole 'driver' of the project.

The initial bridge is used to string across a thicker thread that is the basis of the web to come.

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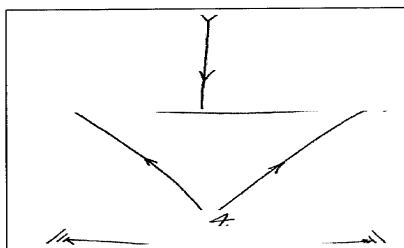
Mike tried to knit everything together and to keep the momentum up. Whereas Tourism Holdings Ltd. had proposed to drill an artificial entrance through solid limestone in order to access the old tourist routes, Mike was convinced that there was a natural passage that must get close to the surface. A new era of exploration in Ruakuri cave was inspired and indeed a new passage (Rimrock) was

discovered and explored and pushed to an area where it appears that an entrance has been blocked by a substantial landslip. Optimism reigned.

It was now a case of complying with the relevant sections of the Resource Management Act (RMA, 1993) and of trying to work out acceptable costs, cashflows and time frames. The RMA imposes a mandate to consult with all affected parties as well as Maori Iwi and pay due diligence to any possible environmental impacts. This part of the process involved working with the Department of Conservation, District and Regional Councils, Maori Hapu and Iwi, other cave operators including Black Water Rafting, landowners, outside karst and cave experts coordinated by Auckland University, the National Institute of Water and Atmospheric Sciences (NIWA), ACKMA members and recreational cavers.

APR, a group of resource consultants, engineers and planners from Rotorua, were engaged to draw up concept plans, development and environmental briefs (based on the results of investigations by Auckland University Services) as well as a preliminary business plan and cash flows.

Our spider moves to the centre of the foundation thread, by feeling the tension, and drops another vertical thread that pulls tight to define the future centre of the web.



By the end of 1999, hearings had been held and the following Resource Consents had been applied for:

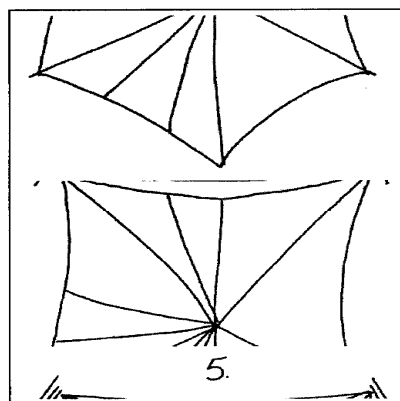
- creating a new entrance
- rebuilding cave infrastructure (in particular the bridge across the main cave streamway)
- excavating a tunnel between Holdens Cavern and the Mirror Lake/Bridal Chamber area
- building a carpark
- discharging waste, and
- extracting water

These were eventually granted. A comprehensive set of Conditions for dealing with, and monitoring:

- the development plan
- cultural and archaeological and cultural aspects
- stormwater and suspended solid control
- the use of explosives
- preservation of features (speleothems etc.)
- microclimate measurements, and
- glowworm population assessments were appended to these Consents.

As any of us know, when you try to develop the 'unknown' then many of the parameters, especially costs are also unknown. In his enthusiasm, Mike had concentrated on gaining access and in trying to get the cave up and operational rather than trying to pin down hard costs for attempting to open the new entrance. The cost of compliance and in trying to provide credible data was high in both time and \$ terms. In late 2000, with several 'opening' dates due and gone, Mike was finally forced into liquidation. He had, however, discovered the complexities of the project and knitted together a network of diverse and interested parties through the consultation stage of the Consent process.

More threads are run out to form other radials and further transverse lines. Our spider continues to apply radials with marginal threads until the outline of the web takes place

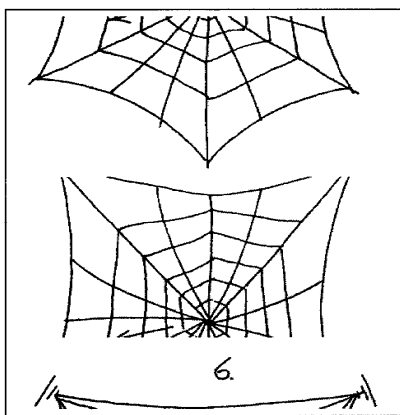


Naturally the Holdens were dismayed at this turn of events. They continued the search for a developer, driven by the memory of their family being the first to operate the cave and the vision of the final product and its potential to benefit the broader Waitomo community.

After taking a hard look at the progress to date, they floated the idea of forming a joint venture with APR Consultants and Black Water Rafting Ltd. (who have been licensed adventure tour operators in the cave for the past thirteen years).

Back to more meetings and negotiating tables but this time the issues are more clearly defined. The product needs to be carefully designed to compliment, rather than compete, with the Glowworm Cave. "WOW" points-areas that fully engage the senses or encourage interaction with the cave environment- have been identified. Careful thought is being given to the orientation and reflective phases of the tour. Visitor numbers will be limited to 15 per tour and cave tubers on Black Water Rafting® trips are being seen as assets that enhance rather than impede the experience. Methods of creating a sense of "ownership" among the visitors are being explored.

Our spider begins to circle out from the centre, attaching a widely-spaced, dry spiral thread as it goes. This is the spiral scaffold that keeps the radials in place and provides the nodes that will facilitate the laying of the final sticky thread.



Monitoring and on-going research are viewed as being critical to the success of the project. They will also provide the opportunity to form co-operative partnerships with the Glowworm Cave and Auckland University; to share knowledge, establish joint programmes and draw more meaningful baselines. Support is being given to preserving the cultural integrity of the old entrance through the creation of a Maori Reserve within the main Ruakuri Bush Reserve body. In fact Ruakuri Cave is seen as forming an integral part of the future of both of these reserves.

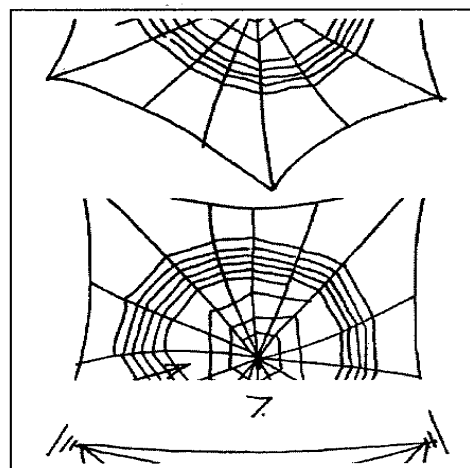
There are also the synergies of staff exchanges, both nationally and internationally, to be explored. Membership and accreditation with associations such as ACKMA, Green Globe 21 and Tourism Industry Training Organisations will provide further nodes to anchor the 'network'.

More surveying has taken place and the free advice of interested experts has been tapped into. The project is being broken down into discrete areas and all ideas are being rigorously analysed in an attempt to build a strong, cohesive and practical development plan. Issues such as the removal of all of the debris left by the previous operators (THC) are being addressed. Costs are being worked and re-worked and given a rating according to the perceived reliability of the data. As a result, the focus of obtaining entry to the cave has shifted from Rimrock to the Drum Entrance (a 44 gallon drum-lined 'tube' excavated and constructed by recreational cavers in 1968)

Sensible costings and conservative visitor number projections allow for believable cashflows that in turn foster healthy dialogue with lending institutions. Structures and systems are emerging. Credibility can and will be won.

"The three key rules of marketing are brand recognition, brand recognition and brand recognition." (Anon.)

Our focus now moves inwards as our spider lays the final permanent spiral. It begins at the outer margin and, as it moves, rolls up the scaffolding thread while laying down a new line of silk. This new thread is laid much more closely than the early scaffold thread. It is coated with a sticky substance that will trap the prey.



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