Rural Works

Vertical Studio, 2016

Credits

With thanks to:

Mr. J. Nicoll and family
Fallowfield Joinery
Blackhorse Workshop
Welsh School of Architecture

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Introduction

Vertical Studio is an annual workshop run by the Welsh School of Architecture, Cardiff University. In the summer term, first and second year students studying their BSc in Architecture are invited to participate in one of the several tutored groups, to broaden the experience of students through an intensive design and research project. In April 2016, the Rural Works team - twelve students and two tutors - visited the Village of Staveley in the Lake District to study the unique landscape, and respond to the context through observational drawings, and the making of small scale temporary installations.

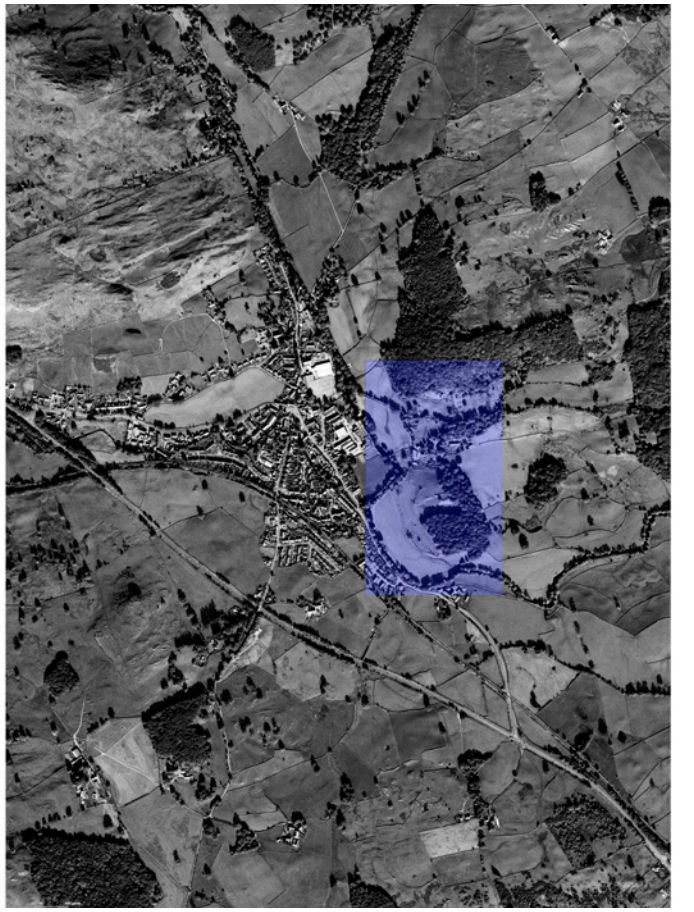
Central to the concerns of the Rural Works programme is an interest in working hands on. In a time when architectural practice is often played out in offices and on computers, we try to embed ourselves in the rural surroundings, to directly observe the particularities of this place. Sketching was used as a form of contextual research, to capture notes and ideas whilst on site. The drawings are both a research method, as well as a means of communicating ideas. Throughout the week we moved back and forth between drawing and making. This placed students in the position of architect as maker - trying to articulate, then realise, a small scale idea.

We were delighted to have use of a stone barn, set on the edge of the village. This acted as our studio - a space for meeting, talking, drawing and making. Armed with a simple set of hand-held tools, students worked on turning concept ideas into three dimensional installations.
Working in small groups, four installations were produced. Each responded to an aspect of landscape, and sought to enhance or draw attention to an existing feature. In the following pages each of these four projects is explained through sketches and photographs, and a series of hand drawings produced after the visit. These latter drawings provided a means to review and critically analyse the small structures that were built, and students developed individual ideas as to how the installations could, with more time, be developed further. The rest of the content in this booklet is written by the participating students.

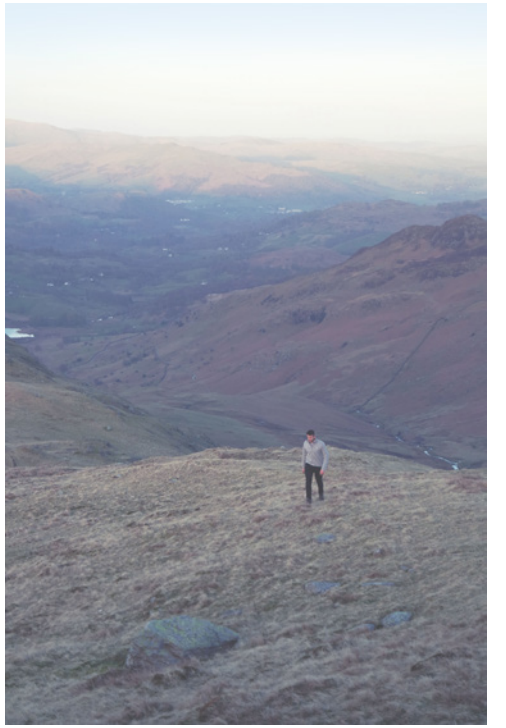
Zoë Berman
Tutor. Founder/Director - Rural Works

Context

Staveley, The Lake District, April 2016



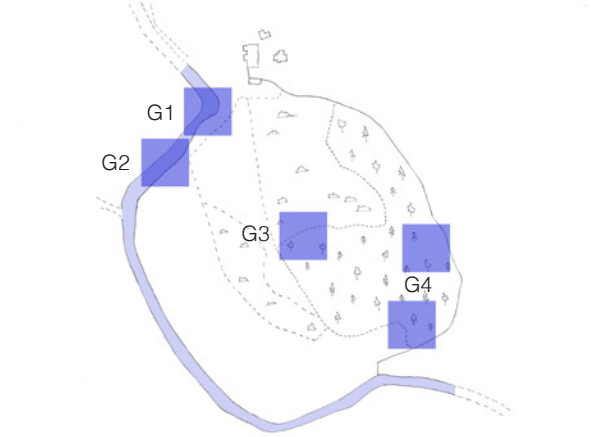
Thanks to geological and glacial processes that have shaped the spectacular mountain scenery of the Lake District, the land is rich with slate, crystalline rocks, limestone, coal and red sandstone and the resulting topography includes England's highest mountain and deepest and longest lakes. High open fells contain a mosaic of craggy peaks and screes, heaths, bogs, heather moorland and grassland, as well as remote valleys with fast flowing streams. In contrast, the valleys shelter lakes and woodland alongside enclosed farmland with traditional stone farm buildings - here is where you'll find Staveley, our location for this studio.



The village of Staveley got its name from the woodworking industry that thrived in the area thanks to the forests that originally covered the surrounding hills, and the close proximity of two rivers for processing the wood. For its relatively small size, Staveley itself has much to offer – excellent walking, fishing, cycling and a vibrant array of local businesses including Hawkshead Brewery, Wheelbase and Fallowfield Joinery.

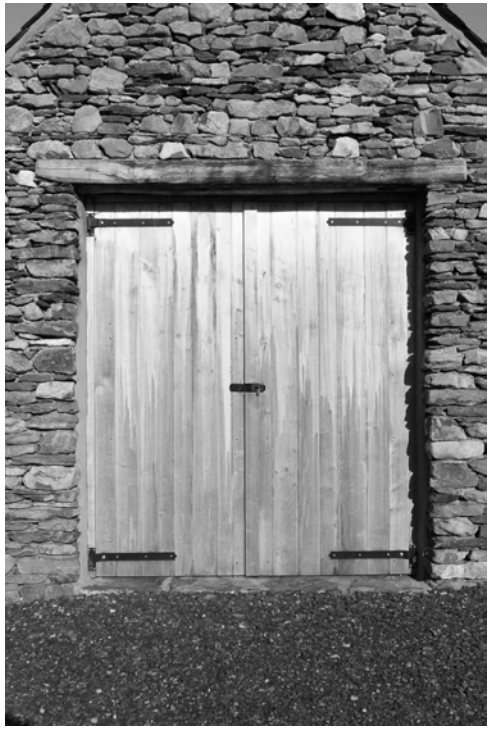
One of the most characteristic features is the array of dry stone-walled fields that have been accumulating since the medieval period, this pattern of 'fieldscapes' has not changed significantly since the late 18th century. The area has always been and remains today a living and working rural community. Generations of labour provide a distinctive example of man's ability to respond to and thrive within a challenging landscape.

Staveley



Site Plan

Our site, Staveley Park sits to the North-East fringes of the village. A cluster of farm buildings overlook the winding River Kent, with low lying fields at the bottom end of the site that sometimes experience flooding at the confluence of the two rivers. There's also a small woodland to the East side, privately owned but open to the public, which is popular with dog walkers. Along the track, passing the woodland, is a pond - an ideal habitat for wildlife. Beyond, the undulating landscape yields an incredibly scenic backdrop.



Local Vernacular

Cruck Frame Barn

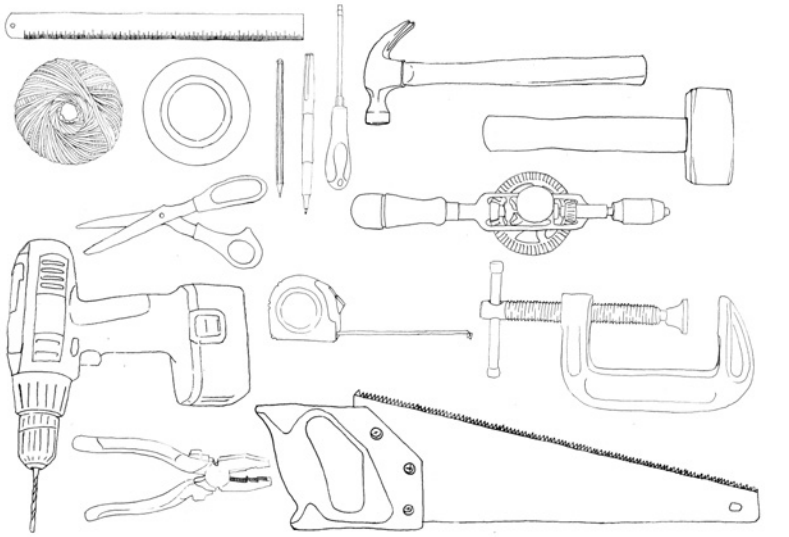
Neighbouring our studio space is a reconstruction of a medieval cruck frame barn. A cruck frame consists of curved timber members, following the natural growth of a tree, that lean inwards to form the A-frame of a roof structure. They are normally constructed horizontally on the ground and then winched vertically into position. This example of craftsmanship is now rare, and this barn is a contemporary example of this historic skill.

Setting Up Studio

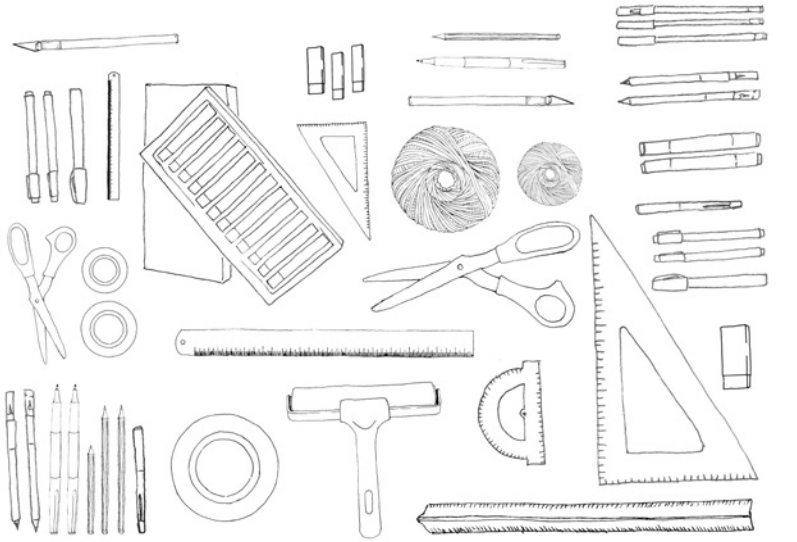
Staveley Park Barn · WSA Cardiff

With the generous offer of a beautiful barn to work in, our first job was to set it up as a suitable studio space in which to design and produce 1:1 prototypes. To enable this we were also lent materials and hand tools.

After a week spent on site in Staveley Village, we returned to Cardiff for the remaining 2 weeks of our project. Back at our university studios, we focused primarily on sharing and learning new drawing techniques, to produce more refined drawings of the work and installations we had made.



Making Tools



Drawing Tools

Preparatory Task

Binding Methods

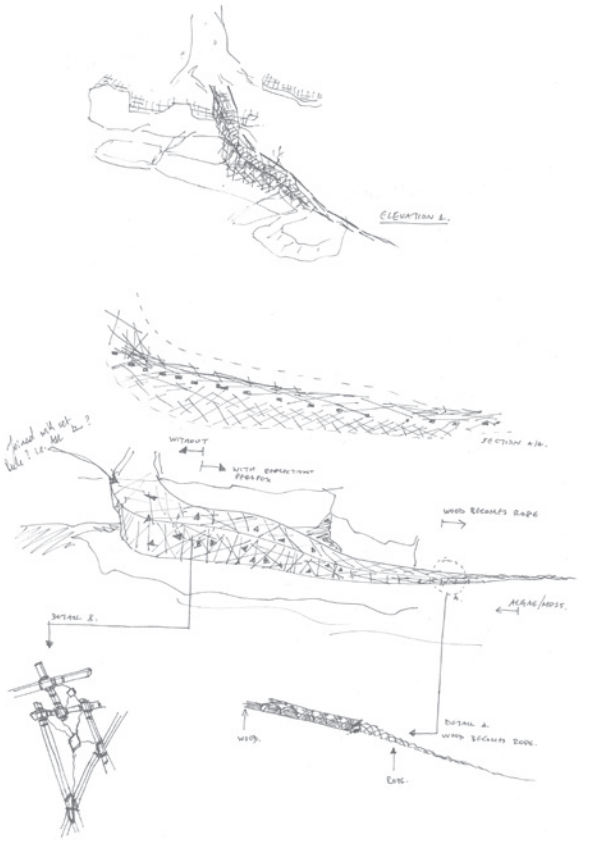
Before arriving on site we were given the task of preparing methods of making joints and fixings by hand. This was important because the main parameter to our future installations was that no permanent marks would be made on the land, so that we would touch it as lightly as possible. All connections to the existing land were to be impermanent – using knots, lashings, twists and simple dowel connections.

Fragmented Movement

Movement · Reflection · Spreading · Time

While observing the river running through the village, we were fascinated by three main findings: the growth of moss spreading, which would creep up the roots of trees and onto stones at the waters edge, reflections of surroundings on the water's surface and the movement induced by the flowing river. Through our installation, we aim to show a connection between the water and its aboveground surroundings. Thus the installation takes the shape of a root growing down and falling into the water, moving with its flow. If it were to be left for a longer period of time, the humidity in the wood would cultivate moss, which would grow to engulf it, thus emphasising further the connection between the water and the land that it flows through.

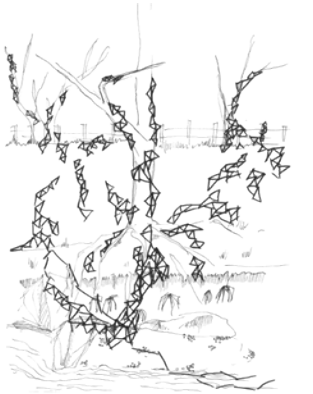
Initial Design Sketches

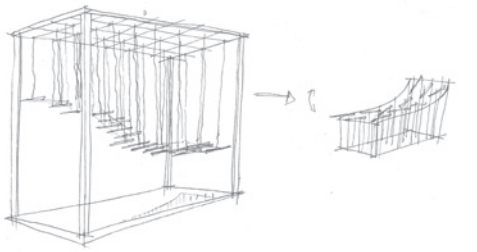


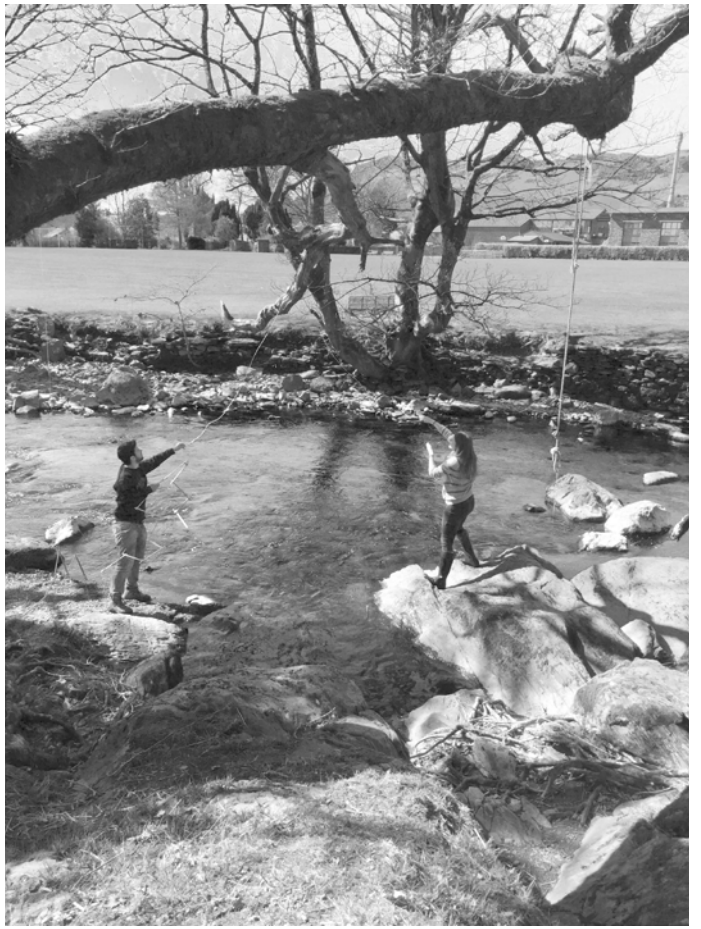
Mapping of the River's Speed and Movement

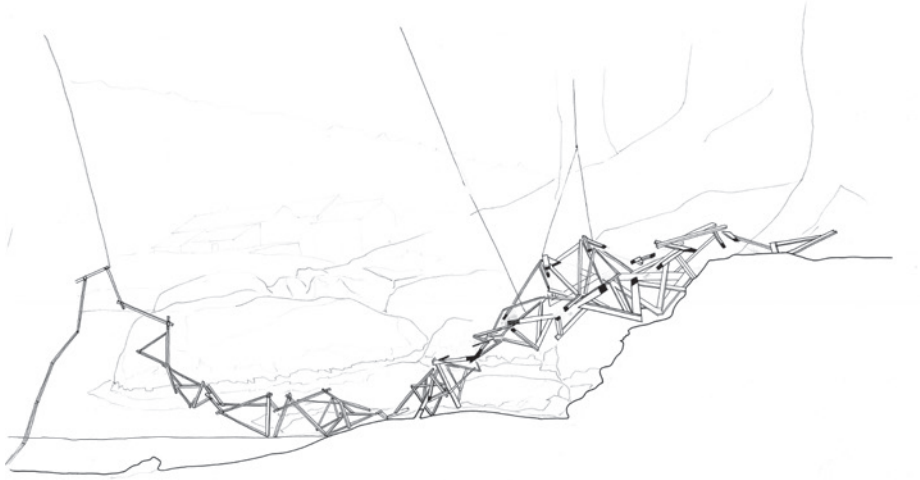
Concept

Exploring and combining ideas of movement, spreading and reflection through sketches and models



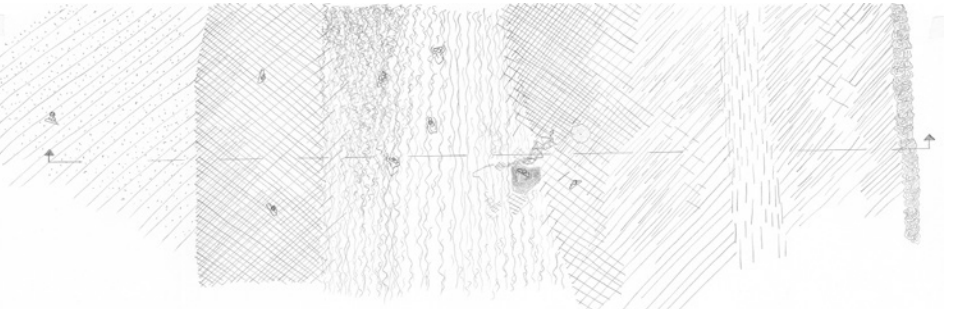






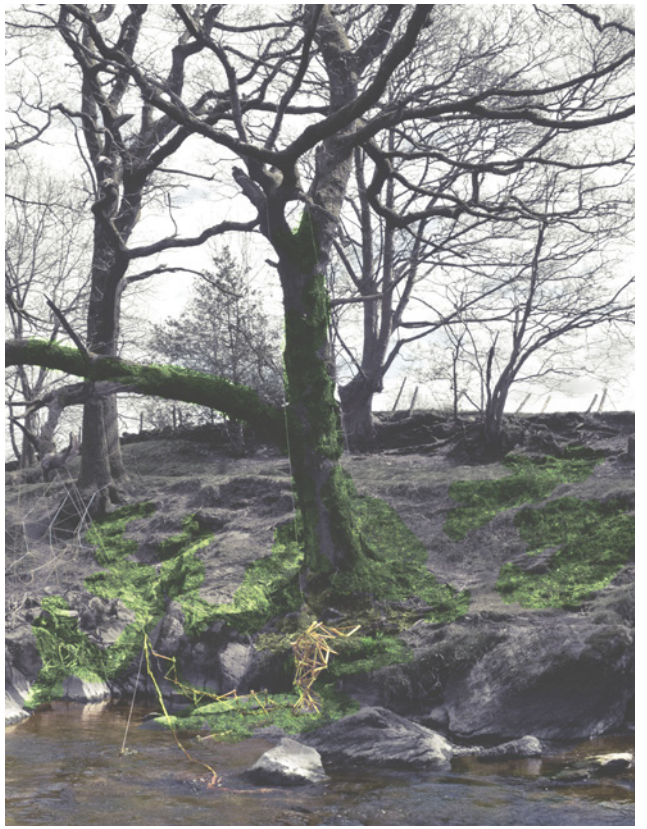
Section

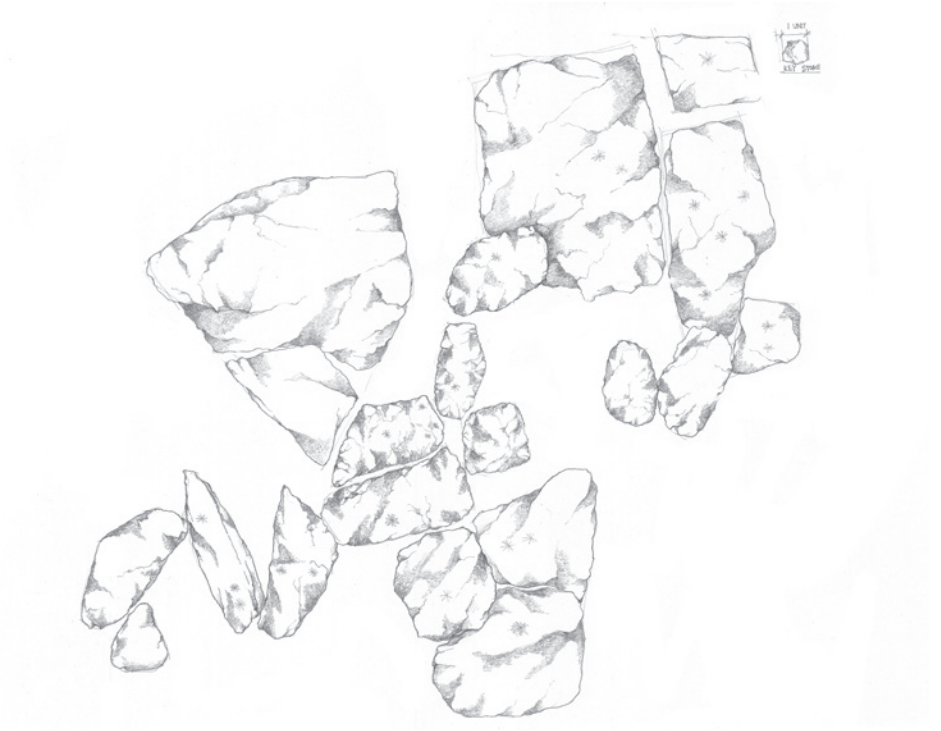
Plan



Textures of the Landscape

Perspective Section





Tension

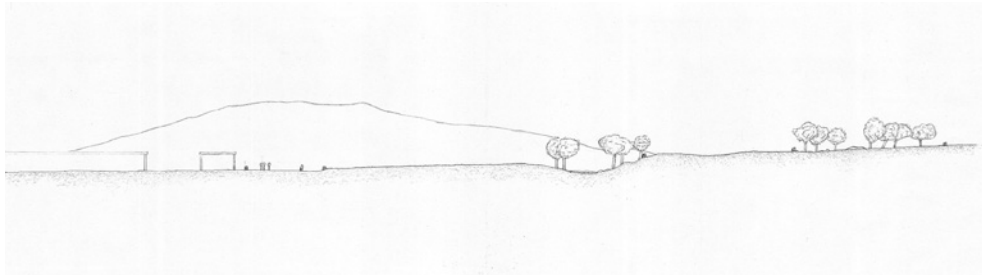
Intersection · Juxtaposition · Structure

The site we chose had two important moments of interest. The first, a stone wall supported almost entirely by tree roots bound to its base, without which, the structure would not be able to stand. The second, a group of large rocks by the river with tree roots interweaving between them – the route of the roots mapped out by gaps between the rocks. These two moments gave us a sense of how heavy rocks and lightweight roots worked together, and we wanted to create an installation that was inspired by that.

We produced quick concept models experimenting with string and pebbles. These models highlighted to us the difference between the solid and the filigree materials, appreciating and building on the contrast of thin light string with heavy, weighted rock.

We measured and mapped out the roots around the rocks using a string grid, which would be suspended above them to reflect the intertwining of the roots. This helped us to understand the site better.

In the installation we used a uniform string grid with triangles, hung above the rocky ground, and from these we hung lines of string with stones – found on site - tied to the ends. We hung the stones using different lengths of string so that their height above the ground would vary. Where there were gaps between large rocks, we hung the stones lower to reflect areas where the roots found a path through the rocky ground. Our installation sought to follow and respond to the shape and contours of the site.



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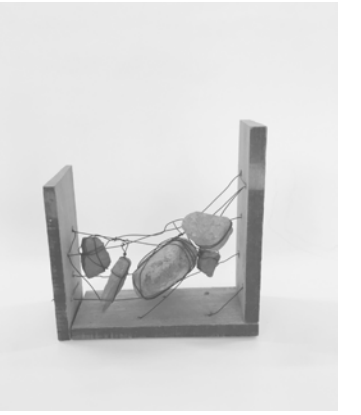
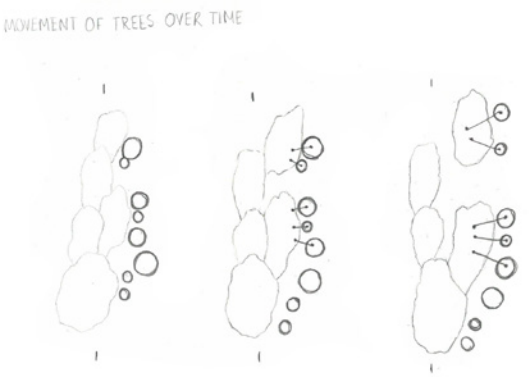
Site Sketch

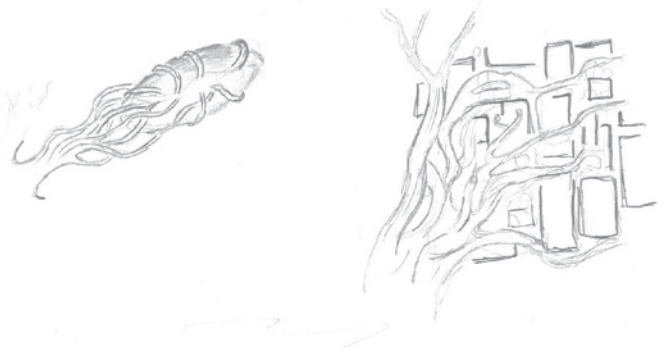
Concept

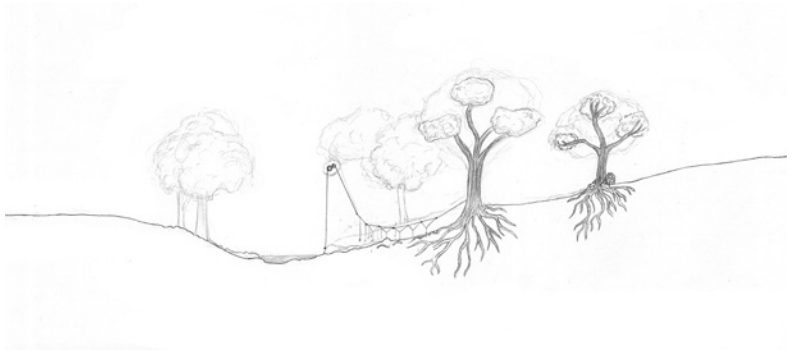
Series of models that explore the relationship between roots and rocks with a focus on tension, suspension and interdependency



Sketches of Intent and Exploration







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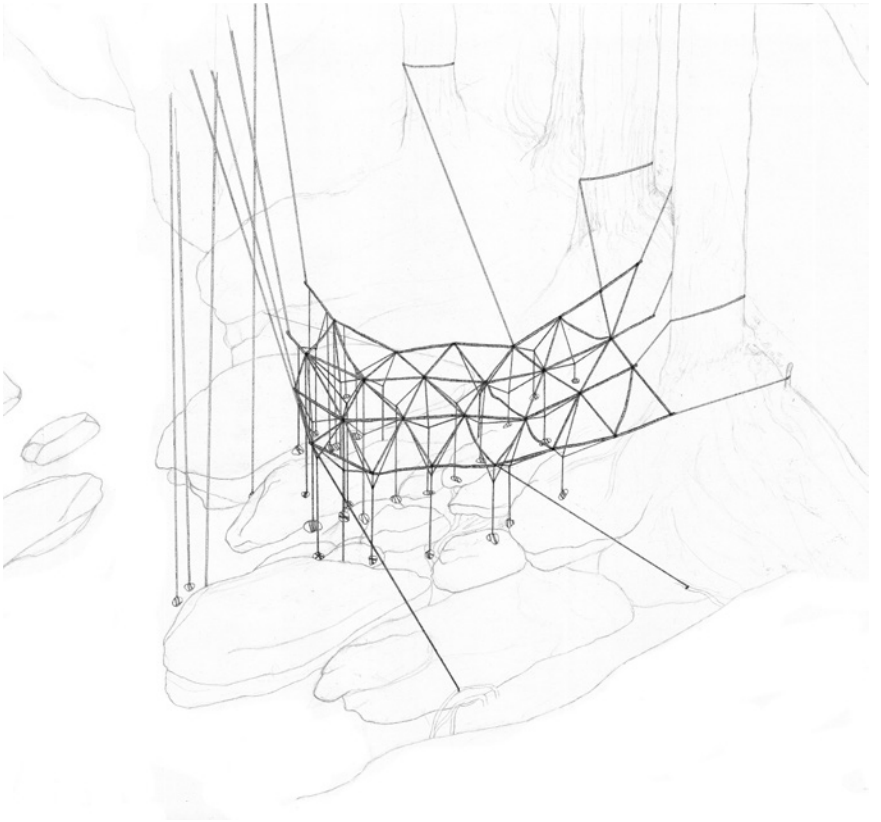
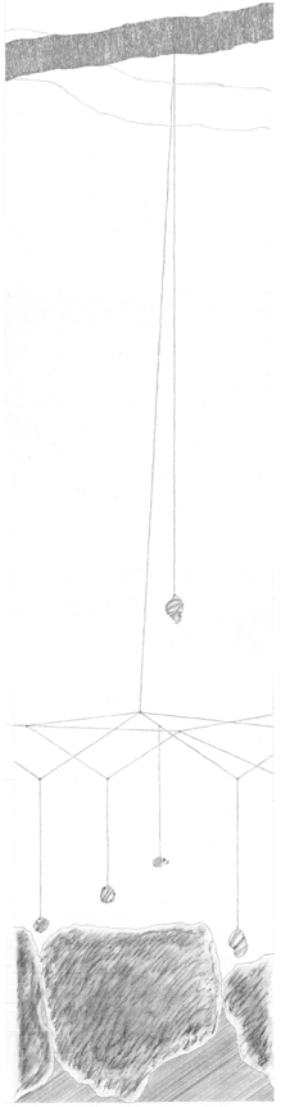
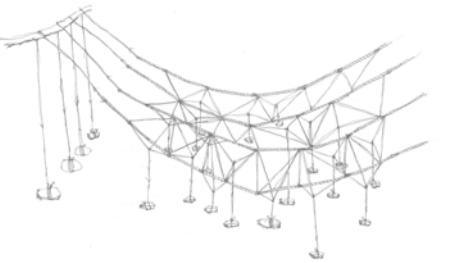
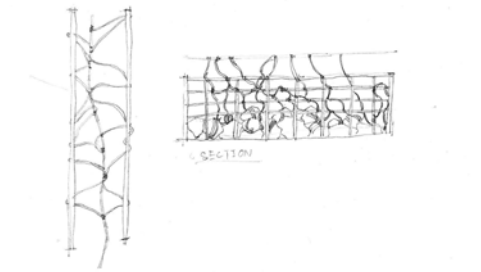
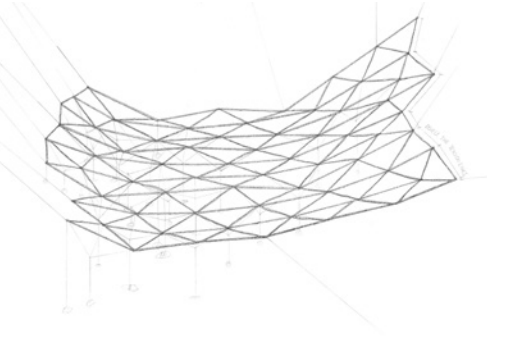


Isometric









Further Development

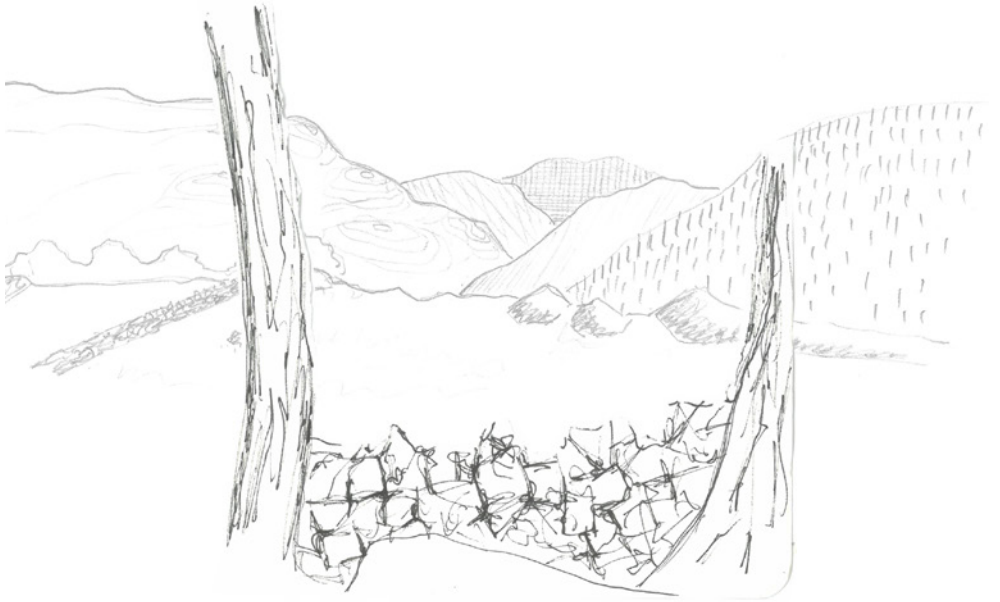
The measurements represent the length of each side of the triangle, that is then replicated across the layer. This results in the layer not being wholly responsive towards what is underneath. If we were to remake and improve the installation, we would propose that we reduce the distance creating smaller triangles so that each triangle and rock that comes down from it can move much further down creating a layer that will ripple with the terrain bellow.

The development isometric drawing shows what halving the size of the triangles would do to the complexity of the layer. The tension from the rocks below doesn't spread out as much across the layer and instead is isolated to a smaller spot, this is what allows the layer to react more to individual rocks hanging down.

Another place of further exploration is a link between the trees above and the rocks below. A way to address this is to mirror the pyramids that hang the rocks in tension, instead having them attach to the trees that are above. As seen in some of our initial ideas, the trees at the top of the site support the rock wall that has fallen over time. The string is our representation of the tree's roots, holding the rocks in tension. If the string could also relate directly to the trees above, the visual connection would be much stronger.

The Projection of Layers

Openings · View · Catapult · Stratification



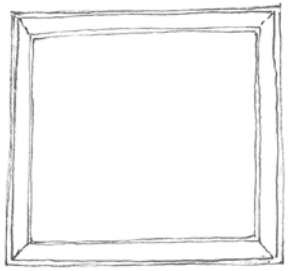
Walking along the paths through the woodland, we came across an opening in the perimeter tree line. At this point we stopped and stood before a large stone between two tree trunks. The two trees acted as a frame within which we could view the picturesque landscape beyond.

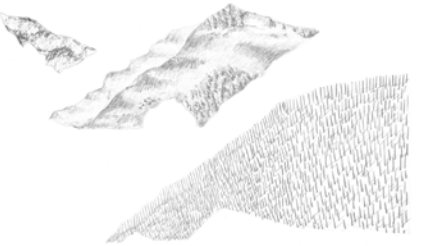
We sat on the stone, looking past the boulder covered field in the foreground to the wooded area beyond, and then to the hills and mountains in the far distance. From this point we were transported from the sheltered enclosure of the woodlands, through a window into the depths of the landscape. Upon moving away from the stone, we were exposed to the changing interplay between the different depths of the scene. We kept moving back until we reached a point stood in front of a third large tree, directly behind the stone. From this point our view was channelled through the trees and focused on a smaller area of the landscape we had previously looked over.

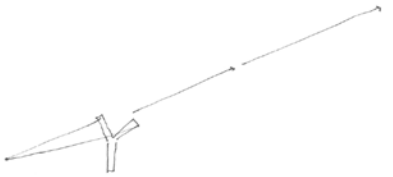
For our installation, we wanted to extend the natural framework of the trees, and amplify the sense of being catapulted from the woodlands into the open expanse of the landscape. We aimed to use the changing perspectives that you experience when walking between the two points to allow people to experience the relationship between the different strata of the landscape, creating an interactive device that complements the existing natural frame structure.

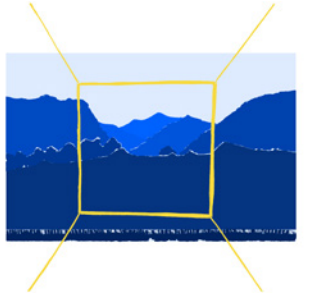
Concept

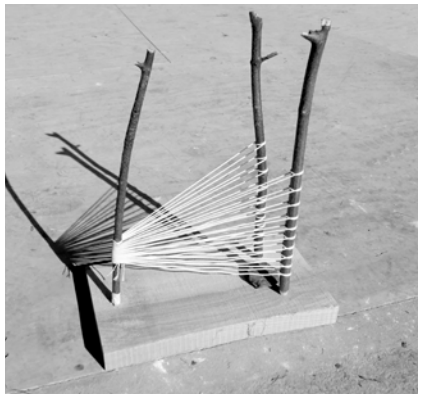
A series of explorations into the layers of the landscape and how to capture as well as project into a view

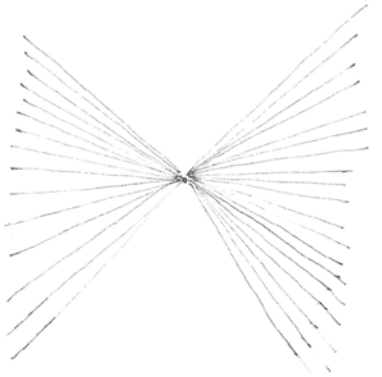




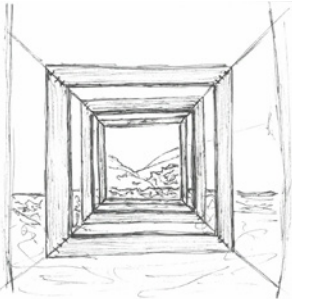


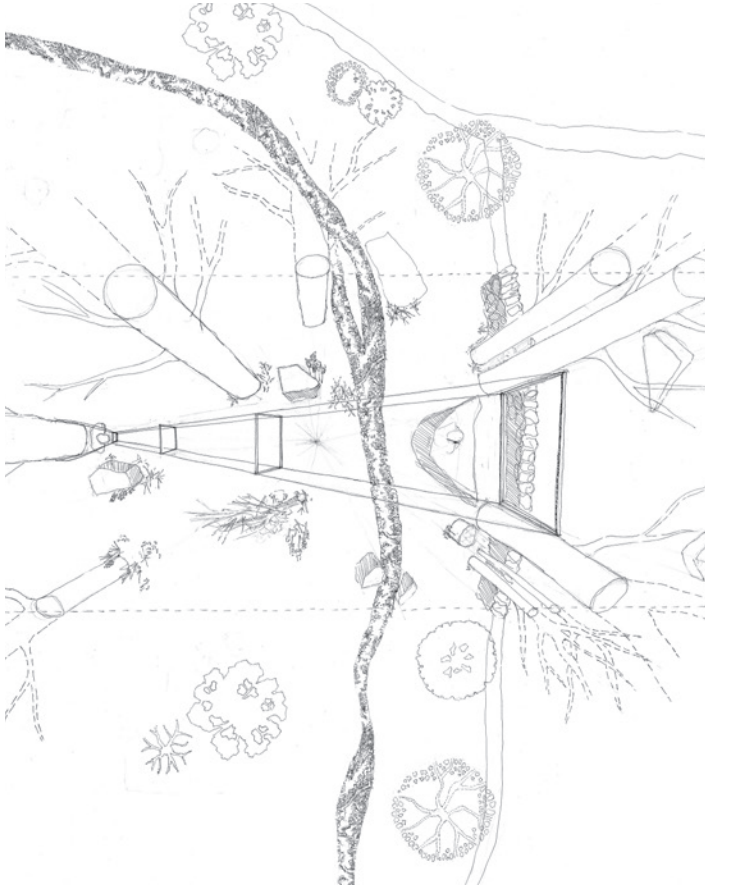






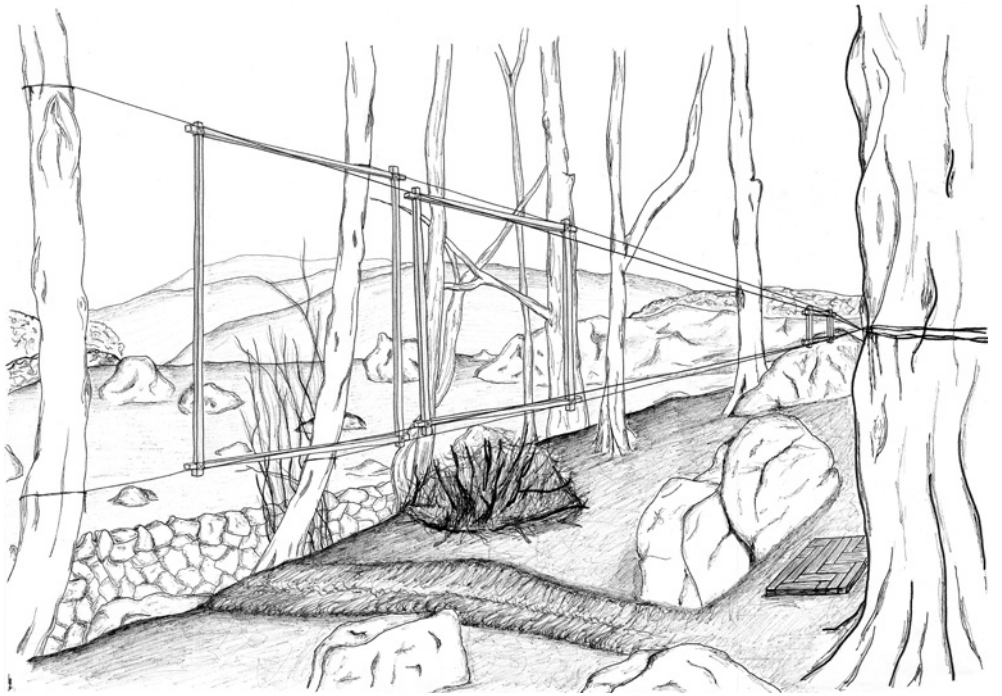
Story Board

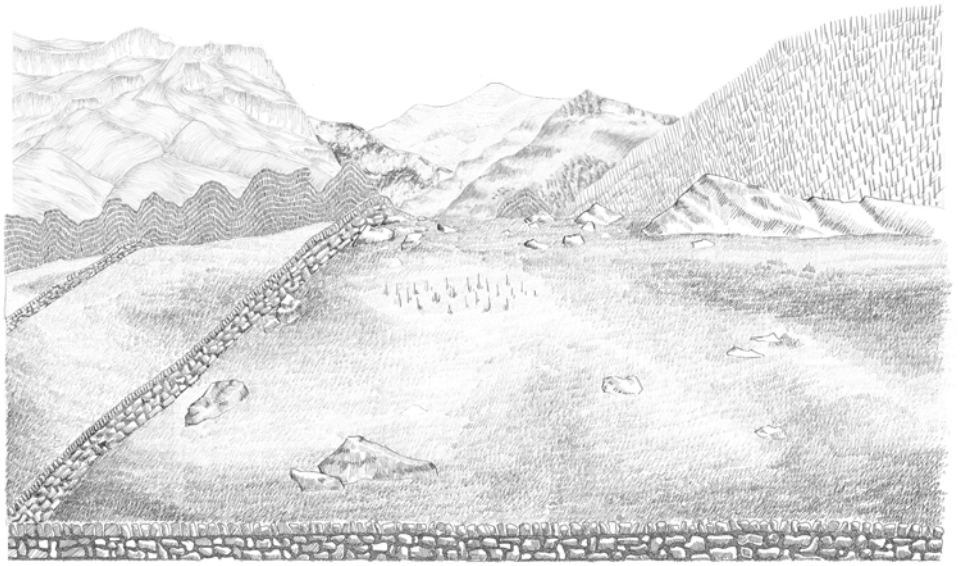


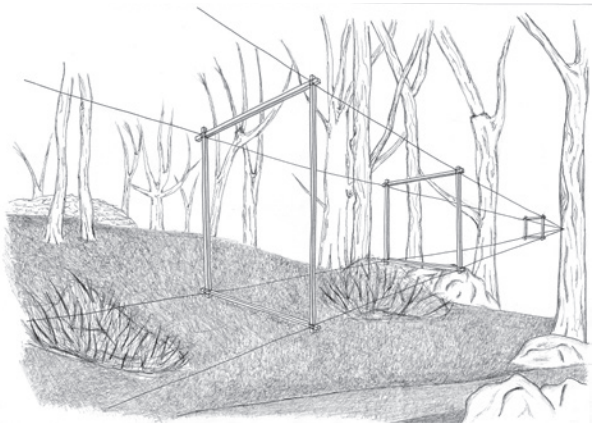


Perspective Plan

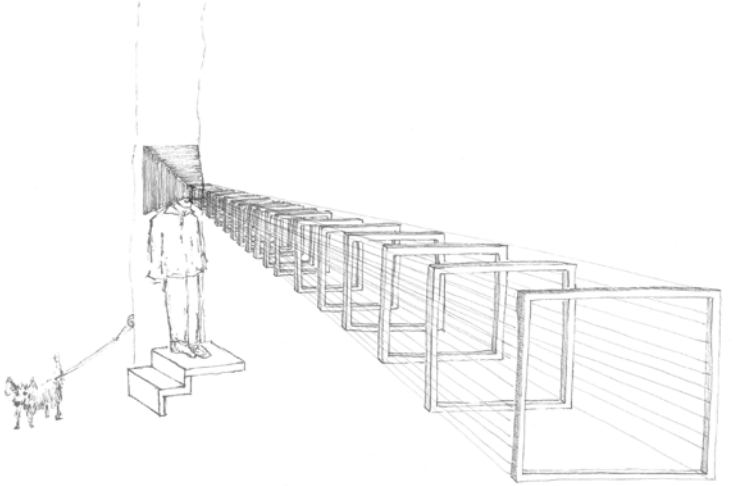
Section



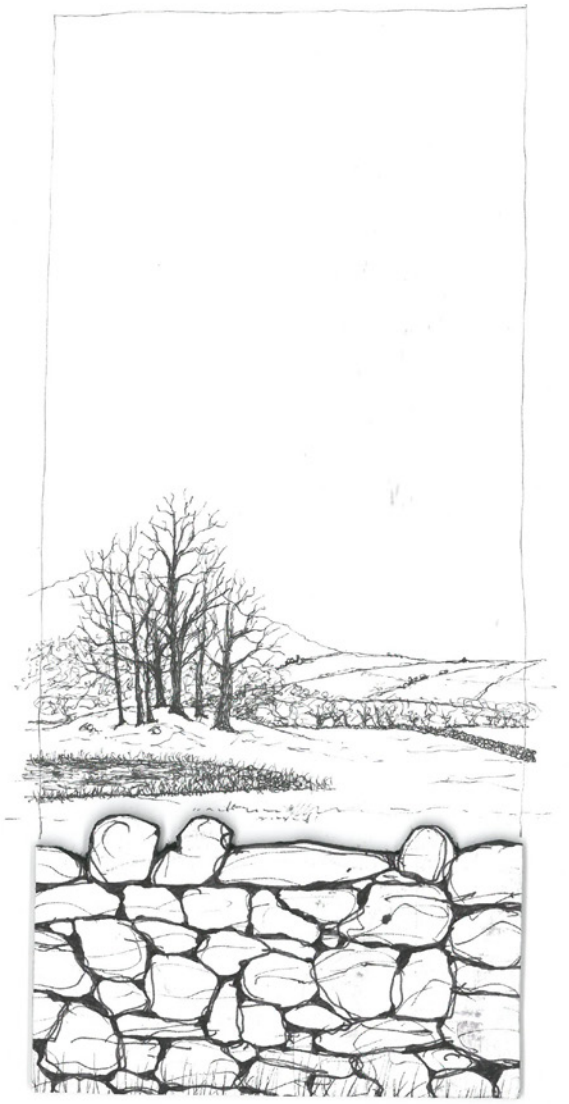




Final Installation



Future Development



Moments on a Journey

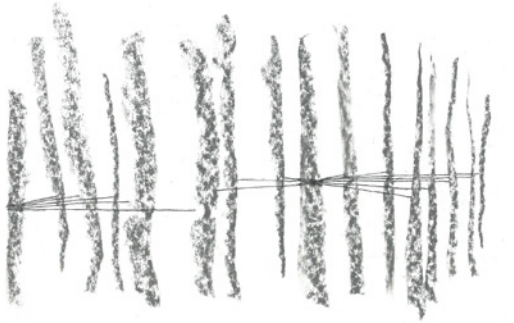
Boundary · Enclosure · Protection · Intimacy

Our ambition for this project was to lightly touch a route through the woodland by installing three interventions along a specific path. We went in search of intimate spaces; exploring boundaries and visualising enclosures within our site. We looked to also build upon or emulate the feeling of protection provided by the vegetation and the woodlands' canopy above. Rather than simply walking along a path, we wanted the user to experience a journey, allowing these interventions to become 'moments'. Each moment is different in their own right, however all express a consistent and appropriate material language of string and timber.

Each intervention varied in their degree of enclosure. We developed the first moment to acquire a tunnel like nature leading up to a vantage point, at which a wide and open view of the landscape could be seen. The verticality of the trees along this ascent was strongly contrasted by the horizontal projection of our string canopy, creating a semi-enclosed space. The physical presence of the canopy could be felt strongly as one needed to duck under to pass through. This was important as it affected the observer physically as well as visually.

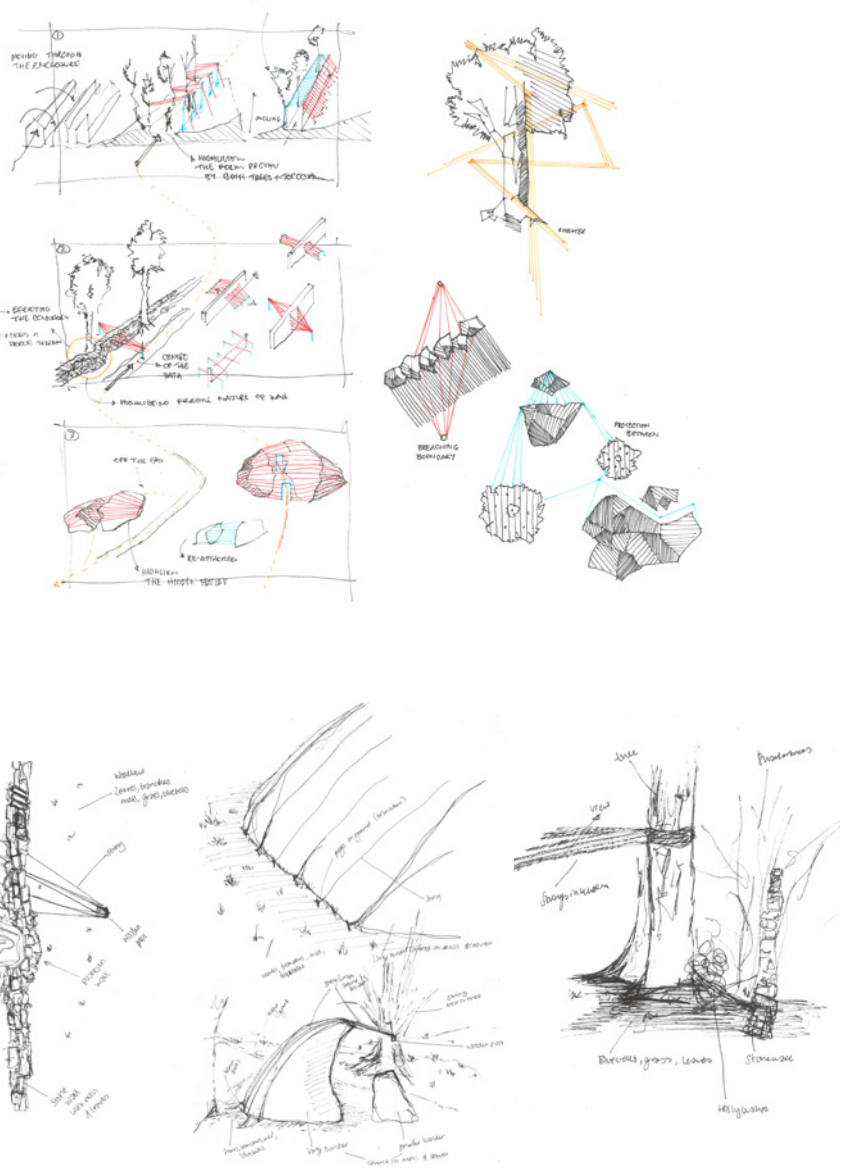
The second intervention was located directly on the boundary between the woodland and the open fields. This boundary was formed by a traditional dry stonewall which also contained many junctions. These intersections where the wall was breeched by tress and oversized boulders held the key to our intervention. We threaded rope carefully through a clear area of wall alongside the path to create a stitch like affect. This moment was designed to make one acknowledge this clear-cut boundary but also to encourage ideas of crossing it.

Although the picturesque views of mountain silhouettes were dominant themes within other groups' work, our final intervention focused on a more introverted view. We inhabited an encased space created by a large boulder that had been split in half. The user was encouraged to sit within this void and face a large internal surface of rock. Hidden away and out of sight from the main path, the only evidence of this intervention was the string wrapped over the south-facing surface of the rock. On the other side this string created a canopy effect above a moss-covered rock acting as a seat. This moment provided a quiet space for reflection at the end of the journey.



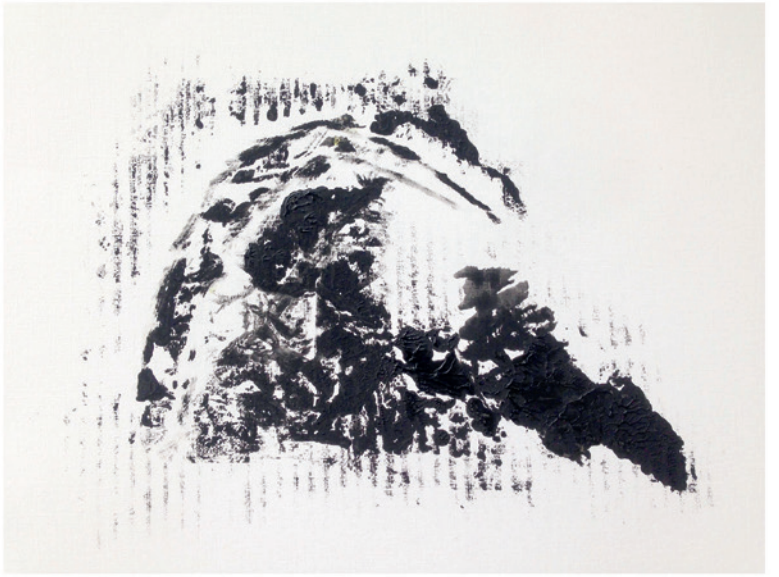
Explorations into the spatial make up of each moment were drawn and modelled to further understand this idea of enclosure and barrier along a journey

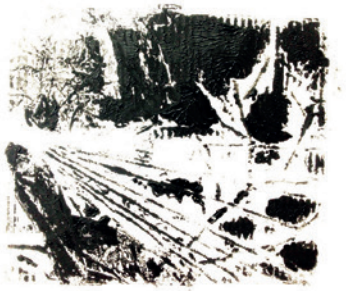
Initial Design Sketches

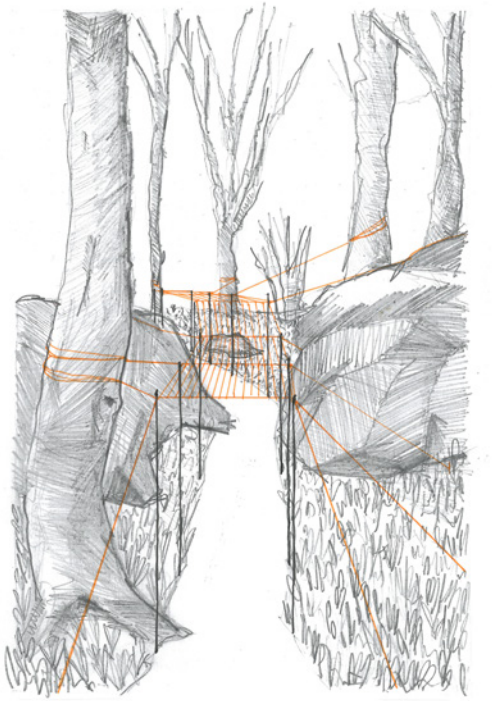


Final Prints

Collagraph prints of each moment throughout the journey, highlighting the textures and shapes of the installations and their surroundings







Future Development