

Drawing Together

Niall McLaughlin and Yeoryia Manoloupoulou taught Unit 17 at the Bartlett School of Architecture at University College London between 1999 and 2019. Typically, a group of about 16 students spent two years together. In 2018, we travelled to Orkney with one group, and they made a collective drawing. We suggest that the way in which the students used the emerging drawing to create a world with its own internal coherence has certain parallels with Neolithic settlers on the islands, harnessing collaborative activity to bind a community in a place. From this, it is possible to argue an understanding of architecture as an embodiment of communal processes. These are subject to endless renewal and are therefore inherently unfinishable.

Orkney is a collection of islands off the north coast of Scotland. Our group explored the archipelago for five days. We walked across the islands every day and the students made one large drawing together in the evenings. We hoped each activity would inform the other, but we were not explicit about how that might happen. The group assembled at dusk in a hall tucked behind the twelfth-century St Magnus Cathedral in Kirkwall. They drew until midnight. We expected that a dialogue would emerge naturally between their growing understanding of the landscape and the way in which the drawing came about. We decided not to discuss this verbally, but to allow matters to rise to their attention through working quietly as an ensemble.

Islands

The Orkney archipelago was created by an infinitely gradual, falling drift of sand: wash over wash of fine-grained particles laid gently on an older geological surface and then compacted by subsequent layers pressing down on top. It formed a stratified crust of Old Red

Sandstone on a metamorphic basement.¹ The nature of the stone varies depending on the mode of deposition. There are characteristic patterns resulting from how the grains were laid down, either by shifting wind or in the slow stillness of lakes. Moving streams spread their conical fans of alluvial sediment, poured out in a wavering, cyclical process. Occasionally, marine incursions spilt their disruptions into the many layers. As the sediments deepened and were subjected to pressure, they fractured into flagstones. The scribbled calligraphy of stress is written everywhere in tiny cracks and fissures. Periodically, the earth tilted slightly on its axis, turning away from the sun, and glaciers returned. Massive bergs of ice, half a kilometre-deep, scoured and gouged the stone surface. Then they retreated, laying new material in their wake in mounds and banks of glacial till. Marking, erasing, repeating.

This cluster of islands is caught in a continuous dance with the sea. As the great weight of ice melted after the last Ice Age, the water level began to rise. At the same time, the earth, relieved of its burden, rebounded upwards. The land and sea rose simultaneously, but not at the same speed. The relative change in sea level produced different phenomena in different places. There are raised beaches eight metres above sea level and there are drowned forests where the water has inundated old wooded landscapes.² Even now, this ballet is active, as the rising tide tears at the land and exposes hidden histories. Recently, at Cata Sand in Sanday, a dune was ripped away by waves in a storm, revealing a Neolithic house underneath.³ The next storm might strip the whole house away and take it into the depths. This world is emerging and dissolving all at once.

Once the ice retreated, a newly exposed surface was colonised by plants and creatures migrating upriver against chaotic streams of glacial outwash. Human hunters followed them. These people found an environment of great variety, including sheer cliffs, sandy bays, salt marshes, oak forest, carr-woodland and upland pasture. At the boundaries between these

conditions, known as ecotones, there were opportunities for a large range of living species capable of providing nutrition for small mobile communities. People wandered through different landscapes on a seasonal basis, changing their diet as each new situation afforded, allowing the earth to replenish itself in the areas they left behind.⁴ They lived so lightly that their trajectories, tools, constructions and beliefs have now almost vanished. Only if you pay close attention to the hidden manuscript of the land, can you perceive the petrified echo of one of their activities: tool making. Here and there, like rain dropping into a still pool, you find concentric circles of flint fragments scattered around a lost hearth. Each broken-off shard is a sounding, pointing back to the repetitive percussion of flint knapping.⁵ If you strain to the limit, you might intuit the social structure of these groups from the relative disposition of scatterings. The flecks of discarded material in the circles are not always evenly distributed. In some places, the fragments have been struck off in a neat and expert way, in others they are slightly clumsy.⁶ This speaks of working groups clustered by age and experience, teaching and learning in an apprenticeship to a lifelong skill.

Agriculture marked the archipelago more than any other human process. Today, the landscape is a stratigraphy of organised production laid down in different eras. It is inscribed with enclosures, old turf cuttings, hill dykes, midden pockets, drains, quarries, the ghosts of walls and a lost labyrinth of runrig cultivation strips.⁷ Ploughing, draining and scattering were agents of continuous transformation. Significant buildings were situated at boundaries: the houses clustered between field and shore, the tombs on higher ground between cultivated land and upland pasture. They were always at the edge, constantly visible.⁸

Not all vectors are cut physically into the land. Invisible forces act in constant procession. Overwhelming tidal currents surge between shores. There is an endless store of words for wind: *kuil*, *tirl*, *gurl*, *skuther*, *skolder* and *screevar*.⁹ Every projecting form has its lee, a wind-

shadow world of congregation and production. Today, islanders imagine a future made prosperous by harnessing wind and tidal forces to generate electricity.

The sea roads carried ideas from beyond the horizon, motifs were transplanted from Avebury, the Boyne and Scandinavia. Above the constant rhythm of the seasons and the sea, cultures came and went. Picts were replaced by Vikings, who eventually ceded the islands to Scotland in the fourteenth century. The great clearances of the eighteenth century profoundly changed the population and their ownership of the land. Huge drainage projects opened up new farmland while the old runrig land patterns disappeared beneath the visible horizon. Orkney fishing towns became central to the North Atlantic and Arctic whaling industries. If you were sailing far north, you collected your crew at Stromness.

Drawing

Our group arrived into Stromness by ferry on a winter night. We stayed together in a hotel on the waterfront in Kirkwall. From there, it was a short walk to our hall behind the cathedral. It had a high-pitched roof and was overlooked by a little mezzanine from which you could see the emerging drawing laid out on the floor. Next to the hall, there was another room with a long table where we could eat together and rest. We worked on the drawing in the evenings when it was dark outside and we could not see out, giving an inward quality to the experience.

In the short daylight hours, we travelled the islands by car, boat and on foot. Wherever possible, we walked. We took a ferry across the great natural harbour of Scapa Flow at dawn, sounding down in our imaginations to the sunken fleet of battleships that lay just beneath. We climbed the Old Man of Hoy and gazed back across the water to the Neolithic monuments around the Ring of Brodgar. We lay in silence on the floor of Olav's Wood,

listening to the Atlantic gales heaving through the trees overhead. At low-tide, we crossed a fragile causeway onto the Viking ruins at the Brough of Birsay, dashing back just in time as the racing tide rose rapidly around our feet. We stood on an exposed strand, our voices drowned out by the roar of the surf. We dropped down into the corbelled cores of old tombs, where the sudden silence was as pressing as the darkness around us. When we walked, we fell into step in little groups allowing intimate conversations, discovering more about each other as we made our way.

On the first evening, we laid out a field of white paper. We sat around the edge and discussed how we might proceed. It was important to initiate a process without determining any sense of a finished form. The role of the teachers was not to draw or to direct the drawing. Our task was to instigate the event and to pay attention as it unfolded. We wandered around amongst the drafters, discussing the relationship between the making of a drawing and the making of a place. We wanted to allow the drawing to emerge as spontaneously as possible from the condition that we found ourselves in. We decided that the size of the drawing could be determined by allowing everyone to lie in a circle on the floor with arms stretched out in front so that all of their fingertips were just touching. As they withdrew their hands and arms, a white expanse opened up from the tips of their fingers to the tips of their toes. In this way, the space of the drawing was given by the volume and reach of their bodies. The drafters occupied this space in little clusters and, as they began to draw, the areas between each group were filled with lines and the places where they sat or knelt at work were left white and unmarked. The boundaries between inscribed and empty space constantly shifted as groups moved about and individuals ferried between clusters.

The participants never instructed or corrected one another. They worked into and around each other's marks without judgement: looking for opportunities, disjunctions or harmonies.

They made no attempt to depict, record or represent an external reality. Roles were not allocated to individuals. The act of drawing as a community made its own horizon. New modes of invention and communication emerged out of the growing presence of the drawing itself. Organised uncertainty prevailed, in which individual autonomy found a delicate balance with collaboration, each extending the possibilities of the other. It was not a predictable process, but, as it went on, a coherence emerged. Mutual recognition came about through ways and methods, rather than through a focus on ends. The work was not so much foreseen as continually inhabited. As a social artefact, it was inherently unfinishable.

The paper was a thick white cartridge brought in 3-foot wide rolls. It was laid out in strips that were closely butt jointed. The edges were fixed to the floor with a continuous perimeter of masking tape. We chose to begin drawing with fine black ink pens, partly because we wanted one point of common identity at the outset using commonplace tools, but also since this single material had a correlation to the unified persistence of stone material culture on the islands. At the start, students brought formal drafting tools with them from the studio: pens, compasses, rulers and French curves. As the process went on, these were augmented with found instruments from the landscape. Round beach pebbles dipped in ink were rolled across the surface; flat sandstone wafers were sharpened into palette knives and used to scrape and smear; sea shells were adapted as fragile ink pots. Individuals and groups developed novel techniques of delineation, hatching, printing, scratching, erasing and embossing and they shared them in a way that was both competitive and cooperative. A line of sewing thread held people's hands together as they drew. When it was discarded, it lay in long loops across the expanse of paper for an instant before it was brushed away.

In practice, the ongoing event was often reminiscent of the parlour game *Twister*, where players have to find ways to accommodate increasingly contorted combinations of bodies on a small mat. The limited space of the drawing required individuals and groups to work

around each other in close, often elaborately proximate contact. These cosy physical accommodations heightened the sense of intimacy within the group and we noticed a deepening connection between the participants as the days wore on. The expanse of the drawing, the ordinary available tools and the bodies of the participants made an environment from which new possibilities for action naturally emerged.

The drawing had its own time signature that was linked to the rhythms of the day and the wider landscape. It was part of a set of interlinked, repetitive rituals: waking, dining, hiking, picnicking, returning, rolling out the drawing, reflecting, drawing, drinking and sleeping. The extension out towards the broad horizon of the islands each morning was balanced by a contraction back to the hall in the evening, before a further expansion into the space of the drawing. Each time we returned to it, the group had been changed and so had the drawing. The collaborators were shaping the piece and being shaped by it. The cyclical nature of this flow and return process was not only central to the work, but also to its relation to the social and physical processes that had created both the environment and culture of the islands. It allowed us to think of the world not as determined form, but as an overlapping set of reciprocal processes that could only be understood in time. Considered in this way, time unpicks the knot of authorship, opening the work to multiple intentions, insights and contributions. It is not simply that the group is there to create the work; at a deeper level, the work is a way of creating the group.

Building

The first settlers on these islands came by sea. Their world lay between the landscape of the archipelago and the tools and memories they brought with them. Their buildings acted primarily as a locus for family groups and communities who moved around the land.¹⁰ It can be argued that the original purpose of houses was to extend the social connections between

individuals in time.¹¹ Building and telling stories expanded the temporal horizon of mobile groups and alleviated the stresses generated by increasingly complex social structures. Within this understanding, the house was not a finite artefact, but a long process involving initiation, transformation, demolition and recreation, ultimately following the emergence and passing of human generations.¹² Houses may have been understood like human bodies in their cycles of renewal, decay and memorial. As such, they acted as a conduit through which known and hidden things passed. A home could equally be understood as a structure, a body and a model of the cosmos.¹³

As the Neolithic transformation passed through the archipelago, tombs, standing stones and stone circles were built from increasingly durable materials. The stone was taken from the beautifully fractured stacks of sandstone flags and laid in patterns that seem to imitate its stratified and folded lineaments. We can see evidence of wedging, splitting and lifting rocks from their geological beds.¹⁴ The stones often hold inscriptions on their concealed faces, marking transitions and thresholds: parallel lines, chevrons, zig zags and cross hatching are cut into their surfaces.¹⁵ They are like hidden re-inscriptions of those old faults we find in the rock itself.

There is some evidence that oak once grew on the islands.¹⁶ The first houses were probably communal structures made from wood and wattle.¹⁷ They are lost to us now, but sometimes we find regular punctuation marks in the earth marking postholes.¹⁸ We know nothing else. We learn most about the living from the shadow cast by them onto the tombs of the dead. Linear stone barrows, divided into stalls, are probably skeuomorphs of wooden long houses.¹⁹ It is likely that these houses predated and participated in the gradual thickening of human communities into forms of settled life. Accumulated material possessions slowed down these mobile communities and bound them more tightly into fixed places on the

earth.²⁰ The sophisticated invisible network of kinship and affiliation between endlessly moving groups gradually ossified into permanent forms in the land. The use of stone in their tombs may have instigated greater investment into a durable relationship with particular places, one that superseded any single generation. To lay claim to your own piece of land, you need a history.

In a beautiful reversal, new masonry houses were created in imitation of stone tombs. Homes became history houses.²¹ They were built and rebuilt again and again, insistently on their own foundations.²² To live in a house was to connect the dead to the unborn in a particular place.²³ Some homes have a deep *millefeuille* of burnt charcoal surfaces beneath the hearthstone, witnessing the passing of fire upwards through the layers, as each floor level was rebuilt at the turning of a generation. Precious sheep and cattle skulls were interwoven with the foundations to memorialise communal relationships between families and herds.²⁴

While there is some evidence of specialised skills involved in construction, it is accepted that building was carried out by extended communities during gaps in the agricultural cycle.²⁵ This was accompanied by feasting and the ritual interment of fragments of human and animal remains. The process of construction and the duration of use were closely linked to the passing of generations. The open-ended nature of this process points to a role for the activity itself as being central to the internal cohesion of larger social groups. For a house, this might be an extended family, for a tomb it might be neighbours sharing a stretch of shore; but the great stone circles at Stenness and Brodgar provide evidence of material brought from the wider archipelago.²⁶ The assembly of these monuments seemed to involve widely dispersed communities coming to a central place with their families and their herds; bringing great stones dragged across the land for incorporation into a binding arrangement.

Such alliances were strategic, fault lines could open between households as the heads of families sought to assert their influence. One way to reduce that risk was to use the act of building as an equivalent for blood, as a way of making others show their commitment to the community through residence and involvement in the architectural process.²⁷

Recent work on the Ring of Brodgar points to it as a place of cyclical ritual assembly. The Ring is positioned at a key transition in a wider landscape, linked visually to other significant monuments at the centre of the archipelago. It has been suggested that its geometry may relate to solar and lunar alignments.²⁸ Inspection of its foundations shows that the Ring was never completed and, indeed, the foundation sockets were not built for permanence.²⁹ It is tantalising to think that its long duration is an accident of its material properties and that, in fact, it was always a provisional arrangement. It might be only one cut from an ongoing process of transformation and rearrangement. If we accept this idea, the architecture was not an assembly of objects but an ongoing performance. Widely dispersed communities would bring their tired bodies together to bind these stones into a ring, containing a space in the landscape, renewing their obligations to each other and opening themselves out to the cosmos.

The dominant architectural culture of our own time remains focused on the authorship of visually sensational artefacts. Each has a perfect moment of conception predicated on individual subjectivity and everything thereafter—construction, weathering, use and alteration—puts this idealised identity at risk.³⁰ In this paradigm, drawing is a way of fixing a building at its conception rather than a method of exploring processes of becoming with their own natural duration. By returning to the origins of architecture in Neolithic culture, where it

operates as a collective performance, binding communities together in time, we hope to suggest another way of thinking. When our students draw together, they imaginatively rehearse the overlapping processes by which a place and culture come into being. In doing this, they form deep and lasting connections with each other in that place. We hope that this will bind them into their own ring that will support them through their education and into their lives as architects.

-
- ¹ Walter Mykura, *British Regional Geology: Orkney and Shetland*, Edinburgh, Her Majesty's Stationary Office, 1976, s. 1.8.
- ² Steven Mithen, *After the Ice: A Global Human History, 20,000-5,000 BC*, London, Weidenfeld & Nicolson, 2003, p. 154
- ³ University of the Highlands and Islands Archaeology Institute, *Archaeology Orkney*, <https://archaeologyorkney.com/category/cata-sand/>, (accessed 2 October 2020).
- ⁴ Mithen, pp. 196-206.
Mark Edmonds, *Orcadia: Land, Sea and Stone in Neolithic Orkney*, London, Head of Zeus, 2019, pp. 32-35
- ⁵ Nicholas Crane, *The Making of the British Landscape: From the Ice Age to the Present*, London, Weidenfeld & Nicolson, 2016, p. 14.
- ⁶ Mithen, pp. 127-128.
- ⁷ Edmonds, pp. 9-10.
- ⁸ Edmonds, pp. 87-88.
- ⁹ Edmonds, p. 11.
- ¹⁰ Richard Bradley, *The Prehistory of Britain and Ireland*, Cambridge, Cambridge University Press, 2007, p. 59.
- ¹¹ Ian Hodder, *Two Forms of History Making in the Neolithic of the Middle East, Religion, History and Place in the Origin of Settled Life*, Boulder, University Press of Colorado, 2018, pp. 3-10.
- ¹² Hodder, *Two Forms of History Making*, pp. 8-9.
- ¹³ Trevor Garnham, *Lines on the Landscape Circles from the Sky: Monuments of Neolithic Orkney*, Stroud, Tempus, 2004, p. 45.
- ¹⁴ Edmonds, p. 79.
- ¹⁵ Edmonds, pp. 259-262
- ¹⁶ Michelle Farrell, M. Jane Bunting, Daniel H. J. Lee, and Antonia Thomas, 'Neolithic Settlement at the Woodland's Edge: Palynological Data and Timber Architecture in Orkney, Scotland', *Journal of Archaeological Science*, vol. 51, November 2014, pp. 225-236.
- ¹⁷ Farrell, Bunting, Lee and Thomas, pp. 225-236.
- ¹⁸ Colin Richards and Andrew Merrion Jones, *Houses of the Dead: The Transition from Wood to Stone Architecture at Wiford Hill, The Development of Neolithic House Societies in Orkney*, Oxford, Windgather Press,, 2016, pp. 16-30.
- ¹⁹ Richard Bradley, *The Prehistory of Britain and Ireland*, Cambridge, Cambridge University Press, 2007, p. 86; Luc Laporte and Jean-Yves Tinévez, 'Neolithic Houses and Chambered Tombs of Western France', *Cambridge Archaeological Journal*, vol. 14, no. 2, Oct 2004, pp. 217-234.
- ²⁰ Ian Hodder, *Çatalhöyük, The Leopard's Tale*, London, Thames & Hudson, 2006, pp. 237-240.
- ²¹ Hodder, *Çatalhöyük, The Leopard's Tale*, p.149.
- ²² Edmonds, pp. 134, 139.
- ²³ Robert Pogue Harrison, *The Dominion of the Dead*, Chicago, University of Chicago Press, 2003, pp. 39-40.
- ²⁴ Edmonds, pp.139-143.
- ²⁵ Vicki Cummings, *The Neolithic of Britain and Ireland*, London, Routledge, 2017, p. 112.
- ²⁶ Colin Richards, ed., Colin Richards, John Brown, Siân Jones, Allan Hall and Tom Muir, Chapter 5, *Monumental Risk: megalithic quarrying at Staneyhill and Vestra Fiold, Mainland, Orkney, Building the Great Stone Circles of the North*, Oxford, Windgather Press, Oxford, pp. 123-127.
- ²⁷ Edmonds, p.138.

²⁸ Garnham, pp.177-182.

²⁹ Richards, Jane Downes, Colin Richards, John Brown, A.J. Cresswell, R. Ellen, A.D. Davies, Allan Hall, Robert McCulloch, David C.W. Sanderson and Ian A. Simpson, Chapter 4, *Investigating the Great Ring of Brodgar, Orkney*, pp.102-104.

³⁰ Marvin Trachtenberg, *Building in Time*, New Haven, Yale University Press, 2010, pp. 11-23.