

## Outward Bound

Fieldwork is intrinsic to the study of architecture. Being outside, sometimes quite literally in a field, is one of the most powerful ways to directly engage with the built environment, particularly when the subject is infrastructural. Infrastructure operates at scales that are often hard to conceptualise, extending as far as the eye can see, and further. Extended networks of pipes, tubes and wires connect urban centres to their distant hinterlands, an invisible dependency that is frequently disregarded, or not even conceived of at all. Personally, I find most infrastructure beguilingly majestic. In the machined landscape of Britain, that has been manufactured for centuries, the idea that infrastructure is damaging to the countryside does not hold water, unlike the many reservoirs scattered across upland moors and mountains.

Reservoirs have a peculiarity that is hard to discern and difficult to describe – a natural unnaturalness, an artificiality almost concealed but never fully masked.

Those with which I am most familiar, old industrial remnants in the southern Pennines, have brooding qualities, stillness bounded by purple heather and a darkness saturated by the peaty soils of the moors. Those with which I am most enraptured coexist with the remains of slate quarrying and within recently protected landscapes – two reservoirs that are part of the Ffestiniog pumped storage power station system in the middle of Eryri (Snowdonia) National Park, North Wales.

Blaenau Ffestiniog itself is a small town of little over 4000 inhabitants that was once the 'slate capital of the world'. As testament to the compelling beauty of post-industrial scenes, the dramatic spoil of this faded process of extraction is itself part of a UNESCO World Heritage Site, the *Slate Landscape of Northwest Wales*, inscribed as such in 2021. Amidst this peculiar juxtaposition of protected industrial and natural

landscapes exists a further layer of human intervention in the form of the power station.

Pumped storage is a type of battery. Water is pumped upwards to one reservoir when surplus electricity permits and then released when demand is high. Such forms of energy generation can achieve full power in seconds as huge volumes of water rapidly engage waiting turbines at maximum velocity. At Ffestiniog, the two reservoirs have markedly different characters. The lower one, Tanygrisiau appears relatively shallow, a long body of water, its benign reaches of marshy reed beds tickle the edges of rocky outcrops, diminutive features in a vast landscape. Its dammed enclosure is barely discernible, long, rather than tall, and predominantly a landform disguised by plantations and the topography. The common air of unreality prevails though and even on the hottest of days its eerily calm waters are still uninviting. The upper reservoir, Llyn Stwlan, is contrastingly compact, deep and powerfully present by virtue of its massive dam. Nonetheless, it is also well camouflaged by its careful siting that takes full advantage of the gnarled mountainsides and closed vistas of its anfractuous approach. The power station building, clad in local slate, is an innocuous, almost irrelevant component of this composition, the labour of the turbines and pumps is buried, out of sight, and even the mass of the dammed water bodies is diminished by the grandeur of the surroundings.

Being amongst this landscape is enticing and vital in garnering an understanding of its scale. The upper reservoir is especially alluring, initially for its incredible dam, a feature that once brought tourist omnibuses to its heights and whose rhythmic buttresses robustly anchor themselves to the surrounding ground. Its mass and massiveness are overbearing from its foot and breathtaking from its head. For fans of industrial buildings, the service structure that straddles the circular concrete

enclosures of the intakes is a no-nonsense cuboid, clad in dark aggregate panels, assertively alien, awkwardly contextual. Yet, the scale of the dam, the lake and its attendant features are dwarfed by the mountains that envelope it. It is encircled by a ring of peaks that give way to the mighty Moelwyn Mawr, rising to 770m (2530ft). Without the dam, the lake could easily be perceived as a glacial feature, sat in the natural basin of the Pleistocene pinnacles. If the engineering of the dam is considered magnificent, then the visual power of the infrastructure together with the awesome mountainous backdrop combines in a spectacular scenography.

Viewed from above, Llyn Stwlan is but a puddle. It is this association, of an incidental infrastructure lost within a landscape, that the Central Electricity Generating Board (CEGB) were keen to promote at its inception. Official postcards drew attention to the landscape and its potential for leisure, one image foregrounded rock climbers, the power station figured innocuously in the midground, giving way to the majesty of the hills beyond. This approach is not surprising, the scheme was controversial from the start, debate rumbled on from its announcement in 1948 as the designation of the National Park was pending and formally constituted in 1951. To ameliorate against impact, a local architect, Sydney Colwyn Foulkes, was appointed as landscape consultant – the earliest such commission by an energy authority. The landforming, siting and planting that so disguise the system were products of his input. Colwyn Foulkes could not, however, hide the scars of prior industries, dramatic angular inclines that once connected quarrying to a railway below remain geometrically stark features of the slopes.

Walking through the quarries, mountains and constructed lakes of Ffestiniog takes one outside of most conventional frames of reference for beauty. The scale and proximity of its natural and manmade elements oscillate between tangibly accessible

and unassailably out-of-reach. It can be touched but is at its most touching when removing oneself from its immediacy and absorbing the infrastructural sublime from the escarpment above.