Landscape as a Functioning Element of Utilitarian Structures: A Case Study of the Irish Vernacular

This paper investigates utilitarian or "everyday" relationships to landscape evident in the interlock of land use practices, spatial strategies, and built structures in the context of rural Ireland.

To contextualise the evolution of this topic I should briefly explain that I and the co-author of this paper Deirdre McMenamin have an architecture and research practice named LiD architecture, which refers to “landscape in design”. Our interest is in the use of landscape strategies and concepts within Architecture, both in urban and rural contexts. Over many years of travelling through diverse areas of rural Ireland through the course of our practice we have observed and documented examples of the relationships between architectural structures and the landscapes in which they are embedded. This research has been funded by the Irish Arts Council.

Historically in Ireland, as an agrarian society, there has been a direct, very economic and resourceful relationship to landscape, reflected in structures ranging from the ancient to the vernacular. This is particularly the case with utilitarian structures such as farm buildings, marine structures, mill buildings, limekilns etc. and it is a selection of these structures that we will look at shortly in the case studies. We suggest that these case studies demonstrate the use of landscape as a functioning or instrumental element in the design, not merely a setting.

Firstly, I would like to briefly frame where this work is sited in relation to other relevant studies and discourse. These structures tend to fall into the category of “vernacular architecture”. However, the aspect that drew our interest to these structures i.e. its highly specific relationship to landscape - is generally missing in the literature we have surveyed, with studies concentrating on style, typology and broad regional variations. As we see in this excerpt from McCullough & Mulvins “The Lost Tradition” which deals with the Irish vernacular as a series of formal typologies.

Although the scope of vernacular architecture studies is the subject of debate, “Vernacular” originally referred to “traditional rural buildings of the preindustrial era…that seemed not to have been ‘consciously’ designed or affected by the intellectual and
artistic currents of the Renaissance”. As John Dixon Hunt observed in his book on the vernacular garden, questions of authorship, patronage, iconography and the international traffic in design theory and practice, which are applied to the “high” culture of Architectural or Landscape Design do not apply, and indeed they do not apply to these case studies we will be looking at here.

However this definition of the vernacular has been criticised for limiting it to “the persistent stereotypes that represent vernacular architecture as picturesque and charming, yet out of date and irrelevant”. Marcel Vellinga comments: “A major shortcoming of much of the current vernacular discourse… (especially that dealing with western traditions) is that it does not really acknowledge the processual, heterogeneous, and adaptive character of cultural traditions,” which has resulted in its treatment as a study of “passive and rather static entities that can be classified into bounded geographical, chronological and typological categories.” In contrast it was the heterogeneous and adaptive responses of structures to their specific contexts, rather than an interpretation of them as generic typological categories that drew our attention to the case studies we have investigated.

Generally the relationship between vernacular structures and landscape is referred to merely in visual terms. For example in Shaffreys “Irish Countryside Buildings: Everyday Architecture in the Rural Landscape,” vernacular structures are described as relating to the landscape by creating a “pleasant contrast to the natural features around… the entire composition contributing much to the visual attractiveness of the Irish countryside.”

There is also a discourse in cultural geography which critiques the scenic approach to landscape - an approach which we would interpret as paralleling the typology/image focused strand in vernacular architecture discourse. Jonathan Smith in “The Lie That Blinds: Destabilising the Text of Landscape” argues that “misrepresentation is inherent to landscape, a term used here in the sense of scenery” and goes on to explain “it rewards the spectator with the pleasures of distance and detachment and the personal inconsequence of all they survey. Thus in regarding the landscape as scenery the spectator is transformed into a species of voyeur.”

Our agenda by interpreting these structures in terms of their utilitarian approach to landscape is certainly not to diminish the often-harsh social history and circumstance of their making or nostalgify those everyday subjectivities which took material form in these environments. We wish to avoid over-romanticising the “ignorance, drudgery,
and exile," which JB Jackson commented, would have characterised poor rural survival.

The case studies I will present here are in the north and the west of Ireland. There is a general correspondence between poorly drained soils and more rainfall days in these areas in comparison to the rest of the country. These areas as a result are generally the most marginally settled and farmed in the country. Equally these poor areas have required of their inhabitants the most resourceful and economic approach to their harsh environment, the desperate intimacy of a relationship determined by survival. For example the inhabitants literally had to make the soil themselves in many cases. This man-made soil, called plaggen, was accumulated through generations of intensive spade labour and continuous applications of seaweed, sand, soot, turf, farm refuse and decayed thatch. (Atlas of Irish Rural Landscape)

In other instances farmers enriched the soil with lime made from a local limekiln. These kilns are a characteristic feature of the Irish landscape, there being as many as a quarter of a million positioned strategically across the countryside to best utilise the topography for their functioning. This required a sloped site allowing layers of peat and limestone to be loaded in from the top, with the furnace at the bottom of the slope from where lime would be removed.

The directness of this physical relationship to landscape extended from the making of the soil to the way the fine-grained intricate field structures grew out of the stony, and undulating topography. This resulted in the use of the spade instead of the plough as the primary means of cultivation of the staple potato crop. This allowed the farmers work to be highly responsive to specific conditions and although very labour intensive also gave much higher yields. This use of the spade gave the farmers’ work the detail of a gardener and the system that developed, called “lazy beds” was actually quite a sophisticated method of coaxing the best out of the soil. The water content could be regulated by adjusting the proportion of ridge and furrow, and the orientation and fall of the furrows were also specifically tailored to the exact site conditions. The careful creation of these micro-topographies is perhaps analogous of the intimate understanding and relation between landform, productivity, and utility that we will now look at in the case studies.

Platform House
An elevated south-facing grassed platform has been created overlooking the surrounding site. This platform has been formed between the domestic cottage enclosing its northern side and by a retaining wall, integrated pavillion, and green house that define its southern edge and articulate the change in level across the sloping topography. This 2 storey pavillion which is integrated into the terrace retaining wall originally operated as a small shop accessed from the platform terrace.

The lower level of the “pavilion”, accessed from the lower farmyard level, housed a stallion which was kept as a business, for servicing mares, and used the adjacent enclosed paddock for exercise. Vehicles were parked at this lower level, and customers to the shop would ascend via the steps to the terrace platform, which became a semi-public space between the house and the shop. The green house utilises the terrace retaining wall and the pavillion wall to provide enclosure and thermal mass, without blocking light or aspect to the terrace above.

The terrace platform has 2 main spatial orientations, the first being its long axis, which runs parallel to the valley and axis of the cottage. The western end of the platform is left open allowing graded access down to the surrounding fields and also allowing low angle western sun onto the terrace. The other orientation is the platforms cross axis, aligned with the entrance lane, terrace stairs, and front door of the cottage. This axis and the elevation of the terrace platform afford a clear view of anyone arriving from the road.

Stepped House

This negotiates and articulates, the sloping topography of the site, utilising change in level to separate the domestic and farmyard functions. The domestic address and front of house occurs at the upper road level while the farmyard entrance occurs at a lower level. This allows a compact and resourceful use of space with functions overlapping by occurring at different levels. The domestic living spaces are located above farm storage spaces which physically separates them from activities of the lower farmyard. The road has been widened to form a small entry court to the domestic quarters by way of a bridge-like structure, which also created a small covered outdoor working space underneath it for fishing net repairs and storage.

This entry court acts like a balcony in the landscape visually connecting the domestic quarters with the subsequent spheres of work it overlooks- Firstly, the farmyard directly
below, then the fields beyond that, then the greater landscape of the bay, which was fished by the inhabitants of the farm, and finally, the horizon formed by the mountains beyond the bay which would have provided a visual register of incoming weather conditions.

This connection is reinforced visually and functionally by the position of the gate into adjacent field and the cobbled surface extending from the building out to this opening. This arrangement establishes a hierarchy between these expanding spheres of living and working and sets the occupant in a clear, resourceful and meaningful relationship to this landscape.

**Courtyard House**

This simple courtyard arrangement comprising dwelling and agricultural buildings utilises trees and vegetation and change in level to form a protected enclosure within the barren and highly exposed landscape of the Derryvalle hills.

This courtyard acts both as part of the working space of the farm but also as the forecourt and address to the house from the road. The road is included in the spatial enclosure of the courtyard by way of the trees on all sides of this space. In this way the courtyard is experienced as a moment of enclosure as one moves along this otherwise open road through this exposed landscape. This is resourceful in the way the roadside hedgerow is utilised as one of the boundaries of enclosure, which also allows the road to be utilised as a continuation of the hard surface of the courtyard for manoeuvring vehicles.

The level surface on which the house and enclosing barns to each side sit has been cut into the sloping topography, providing additional enclosure. Wind travelling down the side of the hill hits the building only at roof level from this side. The scale of the enclosure is created by the high conifers to all sides except where a break is made to the south-western side allowing the afternoon and evening sun into the enclosure.

**Slipway/ Pier**

These hybrid Slipway/ Piers are located on one of the most precipitous and exposed stretches of the Irish coastline, between Glencolumbcille and Slieveleague. These landscape structures articulate and formalise this complex negotiation with the steep and intricate topography, and in so doing create a fusion of natural and constructed
coastal landform. They facilitate and delineate a number of overlapping requirements of shelter and access. This included allowing the movement of boats up and down to the water from the considerable height of the road above; creating protection against waves and wind for boats being launched or moored; and providing space and platforms for offloading vessels and for the storage of boats and equipment when they are out of the water.

The different angles and platform heights, which read as an geometric refinement of the existing jagged coastline provide multiple options for mooring by accommodating different tidal heights, wave directions, and wind conditions. The surrounding rock platforms are also appropriated and adapted so they can be utilised as working and storage spaces. Two scales of access are articulated - the large scale about movement of boats (defined by ramp, boat platforms and geometry of pier, and second scale about movement patterns of people defined by the steps and minimal railings strategically positioned to interconnect different locations inscribed by patterns of use.

**Mill and Hydraulic Fieldscape**

This case study is of the overlaying and adaption of watercourses, field and retaining walls, and buildings including mill, barn, farmhouse, and ablutions outhouse to form a single tectonic landscape.

Watercourses and large walls (constructed of stone from clearing the fields) have been aligned in a negotiation between field geometry and water flow gradients. In some instances the wall and watercourse are combined into the same structure with the water course being concealed in the wall. In this way the watercourses do not interrupt the enclosure of the interconnected series of tightly defined yards. These walls are also used to construct the topography into a series of terraces more manageable for agriculture and livestock.

The back and side walls of the mill are part of the retaining yard walls to the field above, which continue to wrap around the mill to create a sheltered yard. This also allows access from the upper yard into the top storey of the mill allowing the gravity feeding of crops to be threshed or ground by the mill. This change in level also allows the mill building to address the adjacent road and jetty.
Other elements can be found along these hybrid wall/watercourse structures including water troughs, seats, and an outhouse WC that occurs as a small room within the wall utilizing the rapid flow of water below as a drain.

Monks Fishing Pavilion

This unusual yet practical structure was built in the 16th century to provide shelter for the monks while fishing in the river Cong. The pavilion is constructed on two piers in the river with a small arch which allows the river to flow underneath the floor so as not to resist the current. There is a trapdoor in the floor which was used for lowering a net from the sheltered interior of the pavilion. The comfort of this shelter was improved by the inclusion of a fireplace and chimney. The pavilion, is located out from the bank reducing the need for casting and is half outdoor platform, half interior space, allowing both summer and winter fishing.

To Conclude

It is evident in the interlock of built structure and landscape, displayed in the case studies, that highly specific strategic “design” decisions have been made that give these supposedly generic typologies an often highly considered and sometimes quite sophisticated connection with their landscape context. It is in these specifically tailored relationships with landscape that the intellectual content of the architecture becomes evident, and the agency of those who created these environments is revealed. The environments documented in the case studies have an uniqueness born not out of the stylistic devices or the need to express individualism (often evident in the work of the architect or patron as protagonist), but from the most resourceful resolution of the activities and workings of the inhabitants and the maximised use of the immediate landscape to facilitate these patterns of work and life.
LiD

Landscape in Design
The continuous heavy line divides the more oceanic west from the less oceanic south-east.