Three academic practitioners describe their designs for three houses in distinct coastal conditions: on the shores of Loch Fyne, on the Isle of Lewis and in the flat forelands of Dungeness.

Coastal conditions

Christopher Platt, Alan Pert and Gordon Murray

Every house is a hat; you build one for yourself. To quote Sir John Soane, who was one of the first to design his own home. But architecture is more than just a hat. It is a place to live, to work, to raise a family. It is a reflection of our values, our aspirations, our dreams.

Houses are fascinating because they seem to occupy a pivotal position in the spectrum of human construction. They are, perhaps, located right on the watershed between what is generally understood as 'architecture' and what is considered as just 'building'. They allow us to probe the very definition of what architecture is perceived to be. Using the typology of the dwelling - and three examples from three architectural practices - we examine differing responses to context, climate and the vernacular, documenting and evaluating commonalities and differences in design approaches. The examples are a holiday home in Dungeness by NORD, an artists' residence and studio on Loch Fyne by GMA and a house on the Isle of Lewis by studioRAP. Only one has been commissioned by an owner/occupier: The site is a shingle beach in the Atlantic Archipelago of Scotland - a contrast in terms of location, geography, climate, topography and landscape. They are separated by a shift in latitude comparable to that between Istanbul and Damascus. Two houses have been recently completed, while one remains a feasibility study for the foreseeable future. The vernacular response to each situation is unique. The houses are local in terms of configuration, materiality, construction technology and visual response, informed by individual locales and social anthropologies. As Christian Norberg-Schulz writes:

Vernacular Architecture is specifically an image of the world, which makes present the environment in which life takes place, not in an abstract manner, but with a concrete poetic figuration [...].

Communicating ideas is a fundamental part of any research. Traditional academic research is communicated through the medium of journal papers and through chapters in books, using the printed word. Within architecture, it is important to reflect on how knowledge which results in practical value is communicated. We would argue that answers to architectural questions which have been rigorously explored through experiment and invention using the medium of the built object are the physical conclusions of research by design. We think that the built artefact is located right on the threshold between 'design' and 'research' and that it is therefore an ideal vehicle to contribute to an ongoing debate about the relationship between design and practice-based research.

The vernacular architecture of any territory has an unselfconscious architectural quality which contrasts dramatically with much of what we understand in the contemporary world: 'Nothing quite equals a ruin as an image of human endeavour, a symbol of sheer obstinacy or persistence.' This is not to demean the qualities of contemporary design and architecture (which include sophistication, the
use of new materials, high environmental standards, artistic or spatial virtuosity and social inclusion to name a few, but only to distinguish the contrasting characteristics which each display. The unselfconscious character of the vernacular, in contrast, is a result of both a close relationship between the makers and users of those buildings and a very direct way of using locally-available materials and technology.

The architectural imprint of sheltering, of protection against external forces, can still be sensed and seen in many rural vernacular buildings, often sited and built to withstand aggressive weather. In such cases, external openings are often minimal and the awareness of the outside when inside, and vice versa, is slight because the view was traditionally unimportant to those living there. Having to make a living from the land can quickly generate an unsentimental attachment to its apparent delights and qualities. Buildings that are built to support a rural livelihood are more 'work horses' than 'dream houses', more tugboat than pleasure cruiser, and subsequently defer to the natural world and its forces – as demonstrated by the appearance of these buildings. That sense of being utterly exposed and vulnerable to the elements finds its presence in the final form and design of these buildings and gives them the imprint of humanity. It is curious how such buildings can seem such an integral part of the landscape despite the absence of any qualified design professional being involved in any part of their realisation process nor any conscious attempt by its makers to ‘fit in’ in any conscious way.

Dunderave

Context
Our client is a serious patron of the arts, a sponsor of events and artists and a collector of some renowned pieces of sculpture by both new and established artists which are carefully placed around Dunderave Castle Gardens. This same attitude extends to architecture, and his desire to see an inspiring design for a support facility for young artists sitting within the trees [a,b].

From our initial discussions with the Society for the Protection of Ancient Buildings, we were advised that the existing 'garage' building occupying the site was not a listed building and it did not come under the 'Grade A' listing of the castle. From our research, it was clear that the site was developed as early as 1873 with a building of unspecified use that underwent periodic redevelopment from 1893 onwards [a]. Drawings dating to 1900 indicated a single building on the site which, it would appear from SPAB research, was either demolished or redeveloped by Sir Robert Lorimer as a garage associated with the castle in around 1913.

The existing building, in its various incarnations, was subsequently used as a garage, storage space and a residence up to the late 1980s and consequently Sir Robert Lorimer's building was subject to various alterations in its lifetime, including the addition of a roof over the flank walls.

Archaeology
The existing building was found in a semi-derelict state with a series of unsightly additions between the two flank walls [a-d]. Any viable proposal had to include the removal of these walls and their replacement with 'replica' walls extending into the landscape, acknowledging the form of the existing building and reinstating a clarity in relation to the main cottage. It was always our intention to emphasise the existing stone walls and, within the footprint of the habitable building, we minimised their removal. We were keen to make a new piece of architecture in its own right, reflective of its time and function – a design intent equally attributable to Sir Robert Lorimer and his contemporaries. Buildings are a snapshot of time and culture and, while we acknowledged the significance of Lorimer's work, we believed our scheme would bring life and vitality to an otherwise redundant building already in decline. However, in response to concerns over the historical interest of Dunderave Castle itself, the relationships of the built form to the castle remained largely unaltered. Being screened by proposed tree planting, the new studio space would not have any detrimental impact on the castle, nor would it be visible from either the adjacent A87 road or the castle grounds.

Major and minor infrastructures
Robert Close, of the Architectural Heritage Society of Scotland (AHSS), wrote in 1998:

Dunderave, though little known, is undoubtedly one of Scotland's most perfect buildings [...] it sits on a romantic site wedged between the trunk road and Loch Fyne. Idyllic it certainly is, but the tightness of space makes its perfection a fragile thing.

Such a notion, while undoubtedly true, ignores the magnificent setting seen by most of the original visitors to the castle who came by boat. The forest which adorns the hillside, providing a backdrop to the castle, is a wonderful enclosed world [a,d].

It evokes a world encapsulated by Anne Strauss of the Metropolitan Museum of Art in her description of the work of Andy Goldsworthy:

[... the emphasis on stone as a living material, as seeds that nurture growth [... ] counterbalances resonate within the sculpture; a monumental precisely constructed shelter, geometric in shape on the one hand with delicate and balanced forms suggestive of the precariousness and vulnerability of nature on the other.

[Image 0x0 to 842x1191]
The art of Andy Goldsworthy or Richard Serra places objects in a landscape, or distorts familiar patterns in the landscape, to unveil for us new ways of seeing. At Dunderave the dense tree cover which obliterates castle and loch in summer frames fragmented views to Ben Lomond in winter. The 'wooded character' of the site formed part of our design concept and it was vitally important to ensure that this remained, strengthening the existing landscape's enclosing character.

Settlement pattern
Any new building, we decided, must step lightly on the landscape, recognising the existing materials as traces of the past which should remain, representing collected memories (8a,b). Thus, in our proposals, a new structure hovers above, acting as an 'object of distortion' in the landscape, providing a new way of seeing. A 12 metre square copper clad box extends out in a 6 metre cantilever over a sculpture courtyard, providing shelter to the entrance as well as a sense of external enclosure. This in turn engages with a second building, a small gallery, to create the 'place'. At ground floor, the artists' studio can be accessed separately. Above, the residence – a copper-clad pavilion with sliding oak framed glazed screens – provides views out across the loch. The siting of the building is important, only revealed as the visitor approaches on foot, neither impinging on the setting of the castle nor having a significant visual impact from the road (9a–f).

Hinterland: wider patterns of settlement and/or relationships
Across the road from the castle to the north-west, a rock outcrop, flattened mechanically, provides a plateau on which sits a stone ruin, redolent of Lommer in detailing, providing the persistence of site memory which, we felt, should remain. It connects us to both the castle and to the past. Behind the cottage, the land rises dramatically as if to remind us there is a world beyond the enclosure of the forest, at which there is a connection with the loch and the vista to the south-east.

Linsclader
Context
Linsclader is a tiny settlement on the west coast of the Isle of Lewis, the northernmost island of the Outer Hebrides [10]. Life is spread thinly here, some 25,000 people inhabiting a chain of islands that stretch for 200 kilometres around the north-west coast of Scotland. The place is battered by the weather, the prevailing wind and regular drenchings conspiring against any plant growth, the leaves of any tree being so often frozen and dried that it would be well to reach a few metres in height.

Archaeology
The landscape is rocky, sculpted by glaciers and now full of rocky knolls and lochs. From some aspects, one has the impression of a wet desert, a rainy Kazakhstan. However, man-made interventions in the landscape are nevertheless visible: testament to previous communities' tenacity and skill. The late Neolithic site of Calanais is close by [11], as is the Iron Age settlement at Bostadh and the Dun Carloway Broch. Traditional blackhouses here were occupied well into the twentieth century [12].

Little sense of any traditional building remains in this part of the world which has a good sense of fit in its environment. As transport and freedom of movement increased since the 1700s, the blackhouse was gradually replaced with the 'whitehouse' tradition – whitewashed stone walls with a slate pitched roof. Since then, old ways of building have given way to generic timber-framed bungalows, often sited immediately adjacent to the already-dead croft. Practical trades and design skills are thin in these parts and a pervading melancholy hangs in the air.

There was a certain irony in our appointment as architects. The invitation to design a new house for a couple living on the island of Lewis, on a site which included the dilapidated remains of an old tax-harvester's locamer, came with an explicitly straightforward statement from the client 'to do something bold with the new and the old'. Why were we, as Glasgow-based architects, better placed to design something which would become rooted in such a particular and far-flung setting than a locally-based architect? The involvement of a professional is no guarantee that the end result will strike the appropriate note and establish a good relationship between the natural and the man-made. How could a new piece of rural architecture
engage itself meaningfully with the remains of a former settlement?

Major and minor infrastructure
The site is lonely and beautiful [5]. It takes the form of a gently-sloping hill orientated south-north with uninterrupted views across the road towards the north and the sea. Two ruined outbuildings, forming long fingers pointing towards Loch Cearn, Hulashig linked by drystone dykes sit below the former tacksman's house [5.4] and a well-buffeted tree ekes out a precarious existence at the south-west corner of the site.

In such a wide and exposed landscape, one is struck by the powerful presence of anything vertical. The Calanais stone circle, made up of tall, flat memhirs, the old house in its ruinous state and its gables and chimneys displaying a distinctive verticality all made a big impression on us. Ruins have a particular presence because of their ability to be experienced as a series of abstract forms, dislocated from their former life as familiar buildings.

Our architectural response was more influenced by these ruined elements than by any observed or received building 'tradition' in this part of the world. We looked consciously to the distant past in Lewis and to the power of those stone structures which remain in the landscape, rather than to any recent building tradition. So the motley crew which made up the players in this new architectural narrative comprised a living tree, a dead house, two dilapidated outbuildings and a powerful and windswept topography. What could an incoming architect bring to the issue of fashioning an appropriate and humane dwelling here, we asked?

Settlement pattern
We felt that everything on site had a role to play in this narrative. Nothing was to be rejected or dismissed because it was old, decayed or not in use. We discovered qualities in these old stones beyond their former usefulness as shelters for people, animals and equipment. In our new script, they took on their own 'afterlife':

The ruins today is a denial of death. So objects are not allowed to die either, but are preserved. Ruins should not be ruined further, but should keep their present condition until the end of the world. [1]

The design strategy regenerates or consolidates the best of the site's existing characteristics. The proposed new house is seen as the first step in the redevelopment of the site, its robust sculptural form taking the line of the first 'finger', allowing it to better define a garden to the west. The second finger, to be repaired as garage and workshop, serves to contain the garden and differentiate this from the smallholding beyond, to be developed within the network of old walls connecting to the third, most westerly finger [5.5,5.6]. The new building engages physically with the ruined shell of the tacksman's house, re-inhabiting and preserving its footprint with a raised, sheltered garden, greenhouse and tower for study and reflection on the wider landscape. They react against the more recent tradition of leaving an existing ruin alone and building a 'start-from-scratch' bungalow adjacent.

The new building takes the existing ruin and, by integrating a new intervention within it and making a physical link, redefines it as a wing in the new composition [5.6.1].

13 A northwards view with the south-facing elevation sitting and relating to the sun
14 The raised tacksman's house provided a distinctive profile of vertical elements
15 5.1. A strategy of extended 'fingers' jutting towards the sea and generating much needed external space
16 5.2 Plans and sections. The external link to the study tower is apparent. A relationship to land, site and the man-made makes a dramatic break with the more common demolition and new-build strategy of recent domestic buildings on the island
Hinterland
Typical of a rural building of this time, the form and the nature of the openings are a result of a desire to shelter rather than an ambition to survey the beauty of the surroundings [152a-b]. Nowadays, a potential dweller living on such a site would wish their house to do both. It is tempting to reduce the experience of living on a beautiful piece of landscape to a simple gesture of pointing of a large window towards the view. The fenestration pattern that the Lissiaider house takes, however, is more typical of traditional rural architecture [18a-c]. The house presents a consistent character on all sides, formed by a series of tall narrow openings which sometimes break the eaves line externally and provide edited views of land, sea and sky internally. On the south side, its more pointed corner rises gently and opens up to welcome in the light and warmth of the sun to this part of the interior [15].

With its pitched slate roof and weather-boarded walls, the house's overall language is not strikingly modern. The faceted nature of its appearance caused by its cranked eastern flank and the rising falling ridge line gives the impression, like the adjacent tree, of a structure adjusting itself to constant battering from the wind. Like a painting of a ship being rocked to and fro on a stormy sea, it seems to be held in suspended animation, in stark contrast to the King Canute-like obstinacy of the neighbouring ruins.

Dungeness

Dungeness is a site of international importance for coastal geomorphology, both as the largest cuspatel shingle foreland in Britain (Britain's only desert) and as an integral part of a system of barrier beaches extending 40 kilometres from Fairlight to Fyrthe. These beaches reflect some 5000 years of coastal development and provide an exceptional record of Holocene coastal changes [20]. Despite adverse climatic conditions with temperature extremes, exposure to wind and salt spray and frequent drought, Dungeness is still home to around 600 species of plants with flora on the shingle ridges that is unique in the UK. Dungeness is therefore a key British shingle site, both in terms of the range of botanical communities and the large area of vegetated shingle.

There had been a 'smoke hole' or 'herring hang' at Dungeness for hundreds of years, ever since the fishermen who lived there started preserving their catches for their families. Pearl Cottage, the 370-year-old house which had been home to Jim Moate, was being sold on because Jim was retiring. The small one-and-a-half-storey cottage (6 by 7 metres), the associated fish shop, boat shed and smokehouse - with a combined footprint of 150 square metres - create a cluster of shacks which would become the site for NORD's design [21].

Our response to the brief for a holiday home in Dungeness was not immediate, and it was only through a rigorous examination of Dungeness's unique architectural expression, extraordinary history and anarchic atmosphere that we were able to respond to this striking context.

Archaeology
Dungeness is an unfamiliar landscape, a power station next to a lighthouse on a shingle beach with a fishing community, a miniature steam railway, an assortment of sheds, birdbathers and rare species of
try to unravel the story of Dungeness with the anticipation of adding to that story. On encountering Dungeness for the very first time, there is an unnerving uncertainty about the place. The ramshackle nature of the buildings scattered across the shingle appear vulnerable both to the weather and to the constantly shifting shingle landscape. You wonder if the place could ever be remade.

John Ruskin wrote to his friend, the painter George Richmond, about Venice that the ‘rate at which [the city] is going is about that of a lump of sugar in hot tea’ and, as such, Ruskin set about clambering over the stones of Venice with his measuring tape in hand, meticulously recording every detail before the city was lost to the lagoon for ever. Ruskin set out to write the city’s story stone by stone and captured the character of Venice through his obsessive recordings of its scars, decay and craft. Dungeness requires the same forensic rigour: before the character of the place is lost to changing patterns of weather, landscape, settlement and social change.

unintentional and deliberate at the same time. Within the 1966 Conservation Plan, it is described as a ‘frozen mobile settlement’, in reference to the unplanned and uncontrolled nature of many of the buildings deposited on the shingle prior to the Town and Country Planning Act of 1947. This ‘accidental architecture’ was constructed in the earliest days as lightweight homes for the herring fishermen and then in the pre-war years as train carriages bought as holiday homes and literally moved across the shingle.

**Major and minor infrastructure**
The shingle house forms part of this research [23a–e]. It is an artefact and, like an archaeological find, it is a recording of a past life, standing as an object loaded with memories. The research involved stripping back the existing fisherman’s cottage while at the same time beginning to record laboriously the place and its structures through photographs, models, drawings and measurements. Only through closer inspection over time do the random structures become things of beauty, by virtue of the care and attention lavished on them by the people who built them for the purpose they served. These buildings, photographed in various ways, begin to tell the story of Dungeness, constructed by local inhabitants using available, found materials. In some cases, the former railway carriages can still be distinguished from the functional add-ons and lean-tos. Dungeness’s constructions are all different, each one is unique to the hand that made it and their defining features are in the details, which convey skill and craft in some cases and functional necessity in others. While aesthetic considerations seem to have played little part in their construction, there are a whole series of features, based on functional requirements, which the individual constructions have in common. These include: the distance between neighbours and lack of defined boundaries, the traditional ‘but’ form, the door within the roof gable (or loft) accessed by a ladder or steep steps, the painted chimney, the porch, the painted window frames, the use of timber construction, the functional add-on (comprising kitchen and/or WC), the vulnerability and the blackness (to which we will return). We refer to this as the common language of Dungeness [24].

**Methodology: preserving, remembering and remaking**
Our first impression of the plot was as a collection of dilapidated buildings requiring emergency propping, but reverence for the past demands that we should consider the contribution that these buildings have made to the settlement pattern of Dungeness. It is also worth noting that planners only allow redevelopment of shacks providing that something original remains. This is obvious in some cases where the original railway carriages are retained. In our case, it is somewhat more questionable as to what could and should be kept. The origins of the site became the question to be investigated if we were to fully explore preservation as a method of reinvention. The technical standards also bring with them their own acts of visual and functional vandalism when inappropriately applied to an existing building, as well as the challenge of what constitutes a habitable structure, as we progress towards a low carbon future. It did not take too long for our prognosis to suggest the need to
Hinterland

We arrived at a decision to preserve the footprint of the existing buildings on the site. We also arrived at a decision to use a single material and colour for the skin of the building. The plan, section profile, form and materiality of the cottage, smokery, shop and boat store would be traced and then tested through drawings as we applied the programmatic requirements for a four-bedroom holiday home. Making use of technological advancements and contemporary structural methods, we were able to transform these simple geometries into defined domestic spaces, each responding to the footprint and volume available and also to specific views and environmental conditions.

The familiar approach of the functional add-on is celebrated through the creation of spaces to sleep, bathe and eat. Connecting these daily routines are spaces to live, work, rest or play. The spaces between the buildings become spaces to shelter while the entrance is an inverted porch. Derek Jarman created his own garden in the flat, bleak expanse of shingle that faces the northern power station in Dunegens and the fig tree growing in this sheltered corner of his plot is symbolic of the continued battle between landscape and climate. We made a courtyard using the adjacent gables as wind breaks in acknowledgement of Jarman’s sheltered garden space. It is this continued battle that has resulted in what we have referred to early on in this paper as the architectural imprint of sheltering.

Field of enquiry

In pursuing each of these three responses to individual contexts, briefs and clients, the term vernacular must be questioned in the first instance to extrapolate what differentiates the contemporary dwelling from its traditional counterpart. Is this simply about evolving traditions? A Hungarian joiner one day erects a timber building for Israelis. Similarly, in a local response to materials and climate, there are specific exclusions – specific clues to be found in the vernacular – which condition ubiquity and the global. In the case of these three houses, topography plays a significant part in any indigenous response – a flat shingled shingle beach, a vertiginous rock outcrop on a low-lying forested shore, and a wet desert, regularly battered so hard by the weather that trees do well to reach a few metres in height.

It is interesting that, in direct response to the overwhelming anonymity of a global ‘Gulf’ architecture, the Golden Lion at last year’s Venice Biennale was won by an exhibit from Bahrain: three traditional fisherman’s houses for fishermen transported to Venice for the occasion. This was a simple yet effective statement of vernacular values in spiritual and physical terms. They read as almost found objects, yet in a benign climate stabilised by the Indian Ocean. The black houses of the western seaboard of Gaeldom considered here, or the Kentish smokehouse, tell a different story. In our contemporary response, are we profligate and dumb or, as Glenn Murcutt observes, failing to touch the earth lightly more? Can architecture thus be reduced to only two absolutes – to history and climate? The latter accounts for weather, for a responsive materiality, orientation and enclosure, the geology one inevitably finds under the foundations. The former is more complex, comprising memories, traditions, a physical and spiritual context and pure history – vicissitudes inflicted across time.

Ways of working

If research is the process by which questions are answered and original but generalisable or replicable answers are arrived at, then are the results which are documented here the fruits of research? We think they are. All three design approaches share a similar methodology which nevertheless display individual results. Each practice studied the physical and historical context of the place they were designing using a variety of tools. Historical research was undertaken by Gordon Murray’s office exploring Lorimer’s own proposals through the Royal Commission on the Ancient and Historical Monuments of Scotland (RCAHMS) as well as researching its original accounts and the reports by the AHSS. Apart from the existing house which was measured and drawn, studioAR record little fruitful material in Lewis’s recent architectural heritage history and looked instead much further back in time to its Iron Age past and the ancient objects prevalent in the Hebridean landscape. NORD recorded the eighty disparate buildings and structures that populated Dunegens using photography, models, drawings and measurements. All three practices sought clues to help them establish design criteria and help them to design in an unfamiliar place. Distance and proximity were both important, not least because each practice was geographically (and in some cases, culturally) distant from the place where they were building.

The physicality of these places and structures had a significant impact on the subsequent design process in each case. In Gordon Murray’s project, the dense tree cover, the sloping topography, the mechanically-flattened rocky outcrop, the incomplete nature of the existing stonework and the proximity to the castle were all important points of reference. The isolated characteristic of studioAR’s site with its proximity to a solitary tree, shoreline and sea was significant and the sculptural qualities of the ruined houses and outbuildings in the landscape resonated with the Galáns’ standing stones in the architects’ minds. The site was read through their eyes. The many unusual and unique qualities of Dunegens, such as the shifting characteristics of the shore, the flatness of the landscape, the ad-hoc structures, the huge range of fauna and other botanical groupings are all described by NORD and the authors’ own creative output had been tilted by experiencing this unique place. But in all cases, it is, perhaps, the recognition and acknowledgement in the design...
An architect’s way of working in a rotation of urban and rural episodes inspires his way of living. His way of living inspires his work.

An architect’s Tagwerk: notes on Otto Steidle’s work between the urban and the rural

Florian Kossak

Prologue
A green Unimog, the penultimate agricultural utility vehicle, makes its way through a curved, potholed road in the dark woods of Lower Bavaria. What differs from an otherwise everyday scene is the strange, compact structure that rises from its rear body and partly overhangs the driver’s cabin. Painted in a warm yellow and ochre red it contrasts vividly with the muted dark green of the surrounding fir trees.

At the end of the road, the forest opens up and the wide plain of the River Inn leads the way towards the west, towards Munich. Looking southwards through the driver’s window one can see the profile of the Bavarian Alps in the evening sunset. Arriving in Munich the vehicle makes a stop at a busy boulevard lined with cafés and bars. Packed on the pavement between two poplar trees the compact structure on the back of the Unimog slowly moves upwards, like a telescope, until it becomes obvious that the driver, dressed in red, turns, people gather, policemen don’t know what to do and the driver, Otto Steidle, sits amused in the nearby café over a cappuccino.

Back on the road, the Unimog and its retracted tower make their way south, heading for Venice. A journey of three days through the Alps, slowly creeping up the hills through beating rain, stopping in Innsbruck and a bleak alpine border town. Then, the descent into Italy, the colours of the tower finding their faint reflection in washed out walls of the farm buildings that are passed on the way.

Arriving at Venice’s Tronchetto, the streamlined vehicle embarks on a transport barge, more swimming pontoon than boat. It finally docks in the Arsenale. Here the Unimog and the tower seek shelter in a huge and gloomy shed of the Gaggiandre. Surrounded by building rubble, that is quickly arranged to mark out an immediate surrounding territory for the Unimog, the tower rises again to its full height. The evening sun enters through the massive arch portal and makes the colours of the tower glow. Otto Steidle’s Nomad’s Tower has found its temporary home at the Seventh Architecture Biennale, 2, 3.