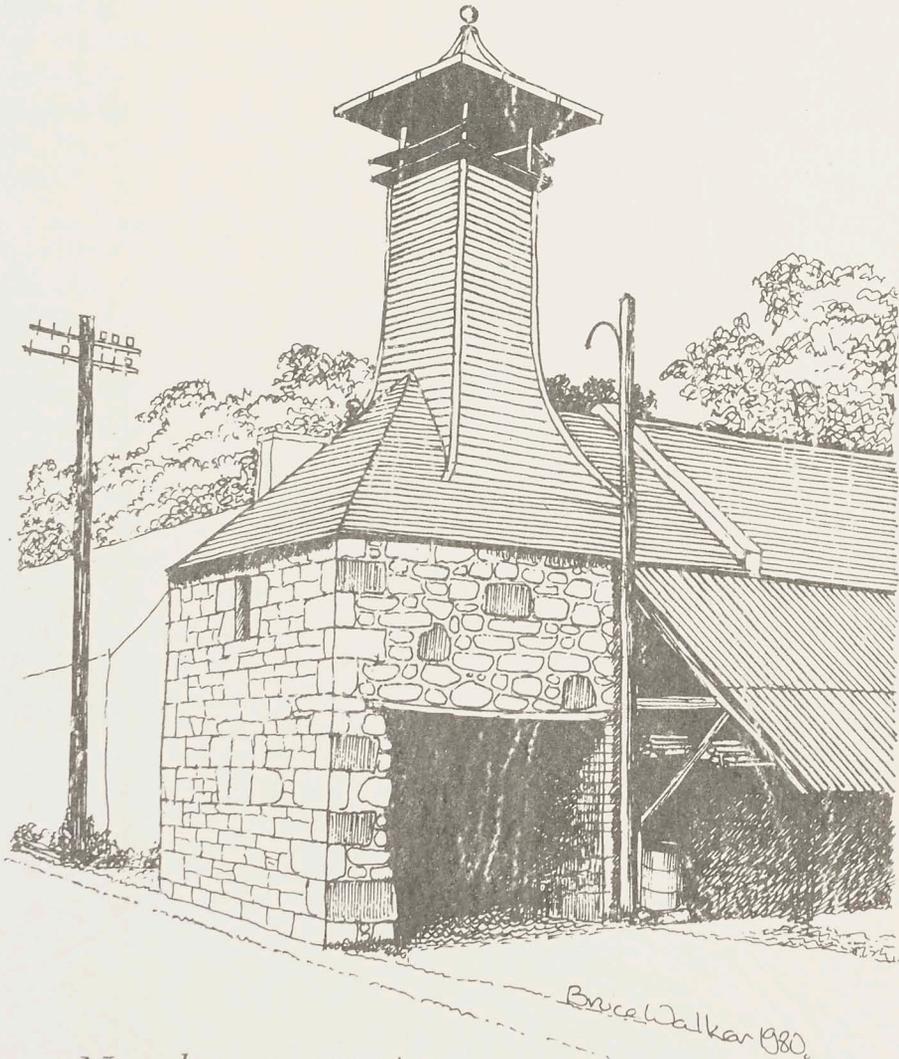


VERNACULAR BUILDING 7

Scottish Vernacular Buildings Working Group



Newsletter 7 1981/82

SCOTTISH VERNACULAR BUILDINGS WORKING GROUP

OFFICERS and COUNCIL MEMBERS

- PRESIDENT* : Dr. Bruce Walker
149 Strathern Road
West Ferry
Dundee
- SECRETARY* : Mrs. Elizabeth Beaton
Keam Schoolhouse
Hopeman
Elgin
- TREASURER* : Ingval Maxwell
135 Mayfield Road
Edinburgh
- EDITOR* : Dr. John Shaw
National Museum of Antiquities
Queen Street
Edinburgh
- PAST PRESIDENT* : Dr. Alexander Fenton
- COUNCIL MEMBERS* : Prof. J.B. Caird
John Gerrard
B.R.S. Megaw
Alex Morrison
Geoffrey Stell.

Editors for this volume - Joan Auld and Bruce Walker

Dundee & Edinburgh
1983

Cover: Mill kiln, Fordoun, Kincardineshire.

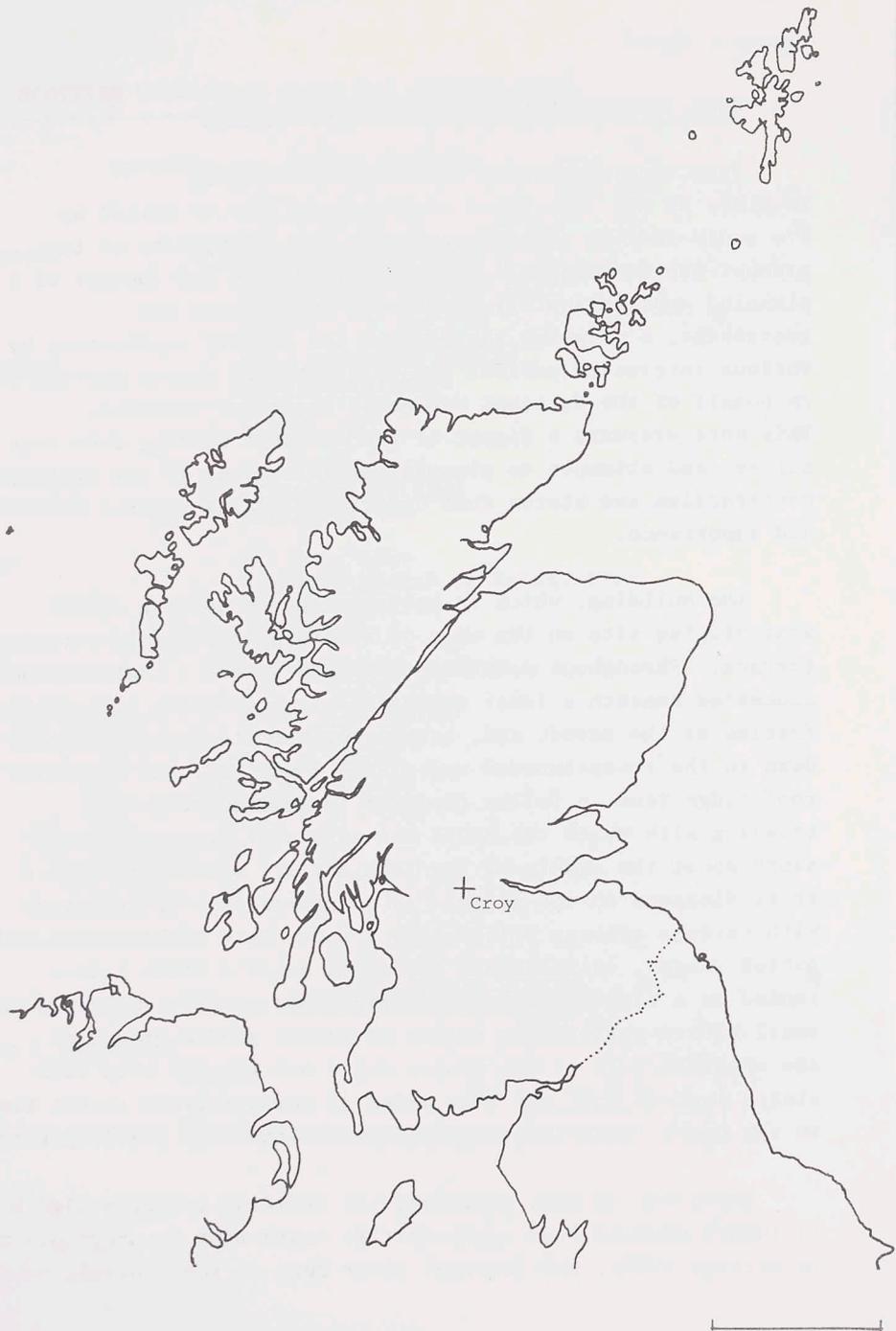
Geoffrey Stell

OVER CROY FARMHOUSE, CROY, DUNBARTONSHIRE

This single-storeyed cruck-framed building (N.G.R., NS 726 758) has a significance that is belied by its sadly-forlorn appearance and by the incongruity of its present-day surroundings. In 1979 it became the subject of a planning application for conversion to a museum and restaurant, a proposal that led to its further examination by various interested persons and to a detailed survey carried out on behalf of the National Monuments Record of Scotland. This note presents a digest of the findings arising from this survey, and attempts to pinpoint those aspects of its layout, construction and status that contribute to its special interest and importance.

The building, which is gable-ended, occupies a south-west sloping site on the edge of a natural but partly revetted terrace. Throughout most of its length it has a thatched roof concealed beneath a later corrugated iron covering with timber fascias at the eaves, and, except for the step in roof-levels down to the reconstructed and slated lower bay, the eaves and roof-ridge tend to follow the fall in ground-level. The steading with which the house has evidently been associated since about the middle of the 19th century stands detached a short distance to the north. It comprises an L-shaped group with various annexes attached to the two main rubble-built and gabled ranges, including at the north angle a steam boiler reused as a high-level water tank mounted on brick piers. A small gabled outbuilding stands in former garden ground on the opposite side of the house, and a brick-built shed with slated lean-to roof has been added in comparatively recent times to the upper (north-east) gable-wall of the main dwelling-range.

Exclusive of this addition, the building measures 21.1 m in length overall from north-east to south-west by about 5.6 m in average width, the internal clear span in the central, cruck-



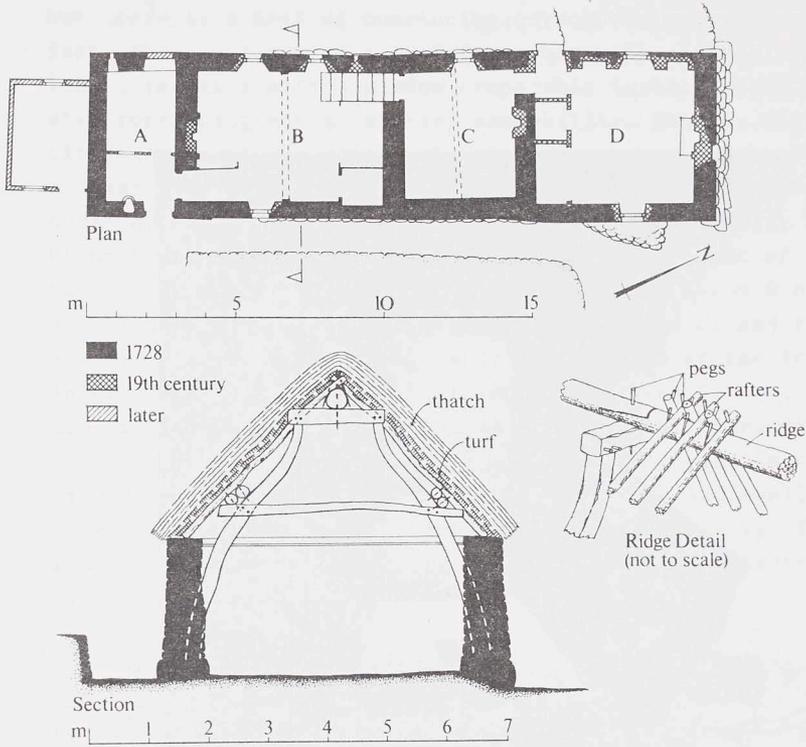
framed portion of the house being 4.4 m. The walls, which tend to have an irregular, slightly wayward alignment, vary in thickness between 0.55 m and 0.7 m, and the side-walls stand to an average height of 2.5 m externally, where they have a marked batter. They are clay bonded and limewashed, and are based on boulder-stone footings which also form a massive revetment or basal-course beneath the lower (south-west) gable-wall. A drainage-ditch, which is partly rock-cut, runs alongside the north-east side-wall.

The irregularities, patches and straight joints in the walling reflect various phases of maintenance and reconstruction, the principal modifications to the original building having been the lower (south-west) unit. It has its own slated roof, independent access (but intercommunication with the rest of the range) and masonry dressings characterised by squared arises and droved tails, indicating perhaps that the date of its construction may have possibly coincided with the earliest phases of the steading. However, judging from the survival of a blocked-up chamfered window (which was subsequently fitted with crooks for external hinges and then infilled to permit the construction of a fireplace) this portion of the building is probably not an addition but a fairly thorough reconstruction and conversion to domestic purposes of an earlier unit at this lower end of the site, possibly a byre. Elsewhere, few of the window-surrounds, embrasures and fittings remain unaltered, but such original openings as have survived wholly or in part, in situ or in re-use, are generally wrought with a 50-60 mm chamfered surround. The disposition of the windows, which are grouped mainly in the front (south-east) wall, give some clue to the way in which the house has been divided up latterly, but the chimneyed mid-gable and opposed entrance-doorways situated towards the upper (north-east) end are the best external indicators of the internal layout which is noteworthy for a building of this class in Lowland Scotland.

The existing doorway in the north-west side wall has a chamfered surround and a repositioned chamfered lintel. The lintel bears the date 1618 and initials (now effaced) carved

in false relief on a sunken panel that is centred above the present entrance to suit its adjusted position, not in relation to the mitred ends of the lintel itself. The doorway in the south-east side-wall which has been partially bricked up to form a window also has a chamfered surround, but in this case the lintel is integral with the rest of the door-surround. It bears the inscription 'I.H., M.M., 1728' and on the face of the top right-hand (north) rybat are faint traces of what may be an incised rectangular sundial and the base of an associated gnomon.

The original thatched portion of the dwelling has an intercommunicating three-unit plan, sub-divided internally by a pair of rubble-built cross-walls. The upper and smallest of the three units (A) measures only 2.35 m along the main axis of the building, half of which was formerly taken up by the 'cross-entry' or 'cross-walk' between the opposed doorways in the side-walls. Built into the north-west side-wall close to the present entrance is a large rounded and projecting stone basin and water inlet (now blocked externally) which has an upstanding rim and is set within a round-arched embrasure. Immediately adjacent to the entrance on the south side is an internal doorway which has a stop-chamfered surround and gives access to the principal living quarters (B and C) through the cross-wall backing onto the entry passage. A mural chimneyed fireplace with plain stone surround is incorporated in the opposite side of this wall. The central and principal chamber (B) measures 6.3 m in length. It has a concrete floor overlaying flagstones, and is lit by three windows with splayed embrasures that have been widened. A small slit window that lit the passage into room C has been blocked up internally. The later timber plinishings include a fixed frame box-bed built against the south-east wall and a framed baffle screening the entry from the fireplace. There is a timber-lintelled mural recess in the west angle which is now contained within a later cupboard but possibly marks the position of an earlier bed. The chamber is covered by a low plaster ceiling just below wall-head height and the haunches of an encased but substantial cruck truss are visible in the side-walls centred at about 3.0 m from the north-east wall.



OVER CROY FARMHOUSE,
 CROY, DUNBARTONSHIRE.
 (RCAHMS: Copyright reserved)



OVER CROY FARMHOUSE FROM WEST
(RCAHMS: Copyright reserved)

A straight joint in the external face of the north-west side-wall hints at the possibility that room C is an addition, but there is a lack of convincing corroborative evidence. In fact, the existence of a roof framework with centrally-placed truss, together with a window comparable to those associated with room B suggest a contrary probability. Room C, which is floored at a slightly lower level and measures 3.7 m along the main axis, has a mural fireplace with a plain stone surround set in the south east gable-wall. Externally, the chimney stack partly projects beyond the upper part of the gable. An intercommunicating doorway between C and D occupies a corresponding position to that between B and C, and there are two steps down to room D which is floored at the lowest level. This reconstructed unit, which measures 5.3 m in length and maintains the width of the rest of the building, gives some indications of its earlier structural origins in and around the low-level aumbry in the south-east side-wall and, as already noted, in the fireplace in the gable-wall. Two framed box-beds are placed against the north-east transverse wall.

The basic form of the cruck truss in room B consists of a pair of single, reflex-curved oak principals that are joined by an intermediate collar-beam and are tenoned at the head into the soffit of a stout saddle for the ridge-tree, a not uncommon type of cruck construction that has been recorded elsewhere in Central and South-western Scotland. In this instance an interesting variant detail is provided by the way in which the common rafters have been secured at the apex: the rafters are laid alternately over the back of the ridge-purlin, and long pegs driven through the rafters close to their ends are laid over the opposite side of the ridge, which in turn is pegged to the saddle. Intermediate support for the rafters, which rest on the wall head, is provided by a double row of purlins carried between the cruck blade and the extended arm of the halved and pegged collar-beam.

So far as detailed specifications and dimensions are concerned, the cruck blades, which are of a 240 mm by 220 mm section squared off on the intrados, spring from the side-walls

at a height of about 1.0 m and extend to a vertical height of about 4.25 m at the underside of the saddle. The collar-beam is set at a vertical height of about 2.75 m and is formed from a 4.1 m long and slightly cambered branch, roughly squared to about 150 mm by 140 mm in section. The saddle, which is some 1.7 m in length, is of a squared 250 mm by 240 mm section. The ridge-purlin, which is made up of scarf-jointed lengths and has now partly collapsed, is about 200 mm in diameter, while the common rafters, which are of birch, are on average about half of that diameter.

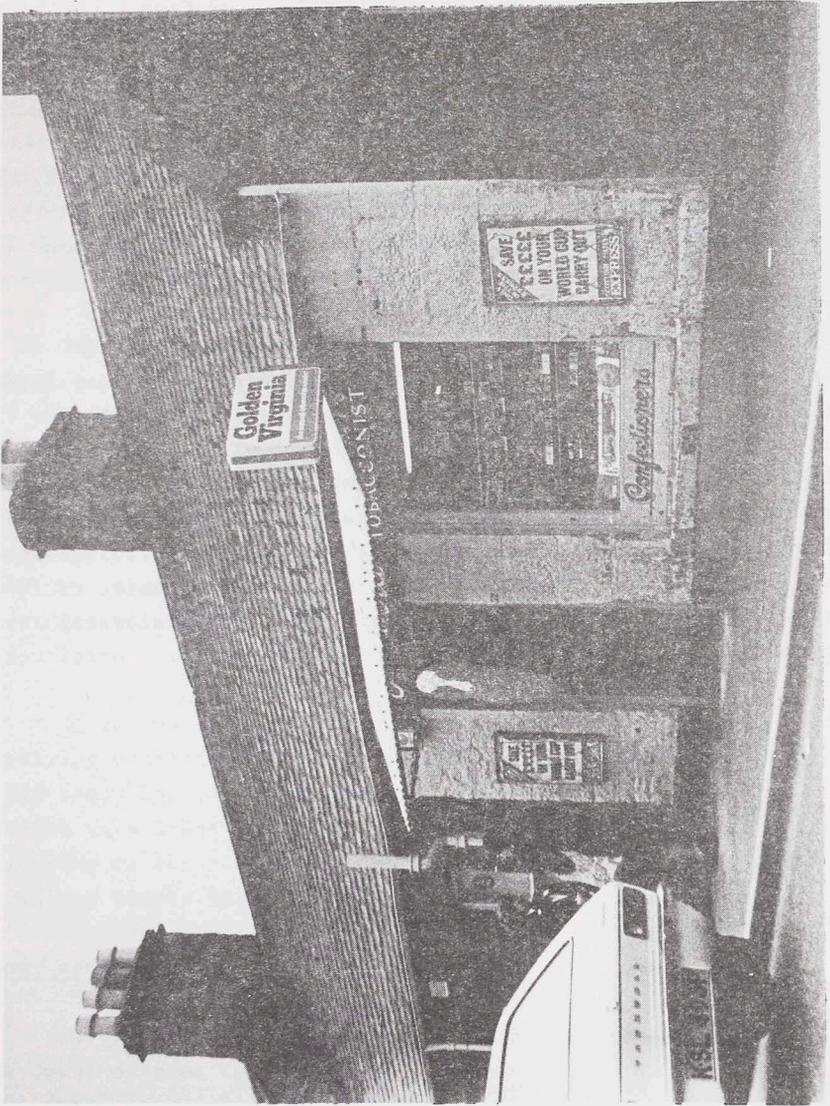
The truss over room C consists of two straightish half-tree section principals springing from just below wall-head height. At the apex they are cross-lapped and pegged to provide a cradle for the ridge-purlin. A collar-beam formed from a cambered branch is notched and pegged to the principals but bears signs of original halved jointing. The evidence of a number of other roof-members, including the double rows of purlins, also points to a slightly makeshift re-assembly. The arrangement of common rafters appears to follow the pattern associated with the cruck truss over room B.

So far as it can be observed, the groundwork for the roof covering consists of a single thickness of overlapping turves laid roots upwards. The superimposed layer of wheat straw thatch is a least 0.3 m in thickness, but the means of securing of the thatch cannot be seen beneath the corrugated iron and timber boarding at the eaves.

Some conclusions

For reasons outlined above, the 1618 datestone, whilst no doubt of some commemorative importance for the history of the site, is unlikely to represent a building date for any significant portion of the existing structure. Although to some extent sui generis, the layout and detailing coincide much more happily with the 1728 inscription, and the associated initials are probably those of John Hay of Overcroy (and his spouse 'MM'), whose sons appeared as beneficiaries in 1766 in what is

now the earliest extant title-deed. The property is there referred to as Overcroy 'formerly called Mains of Croy', and it lay within the lordship or feudal superiority of the grantor, Lady Clementina Fleming of Biggar and Cumbernauld. Of mains farm origin, and thus of some middling grade status, the farm subsequently became attached to the vicarage of Cumbernauld; unlike its steading and unlike many of its peers elsewhere, the farmhouse remained comparatively 'unimproved' in its traditional single-storeyed form. Whatever the reason for this lack of development, the result is that Overcroy Farmhouse remains one of the very few identified buildings of this traditional character in mainland Lowland Scotland that is demonstrably of pre-1750 origin. Considerable intrinsic interest and importance thus attach to its wall and cruck construction, and to its three-plus-one unit plan-form, particularly to the 'cross-entry' arrangement and the hearth-entry relationship, for which there are very few recorded precedents in Scotland. The fact that this little building is situated less than a dozen miles north-east of the centre of Glasgow will also not go unnoticed by students of historical geography.



1. 52 Liff Road. A converted cottage.

Veronica C. Hartwich

PATTERNS IN SMALL SHOP FRONTAGES IN DUNDEE

Shop frontages in urban streets might seem an unlikely subject to study as a form of vernacular architecture but they are one of the few features of city architecture which reflect the individual tenant's means and taste.

A considerable variety of small shop types can be found in the older inner city residential areas of any large town. In May and June 1978, with the help of a student photographer, Mr. Kenneth Fraser, I undertook to make a record of as many as possible of the older small shop frontages in Dundee. I realised that many of the shops with which I was familiar were likely to disappear within a few years. In fact, circumstances, in the form of a rate and rent increase, speeded up the process and many of them vanished within a few weeks of the record being made.

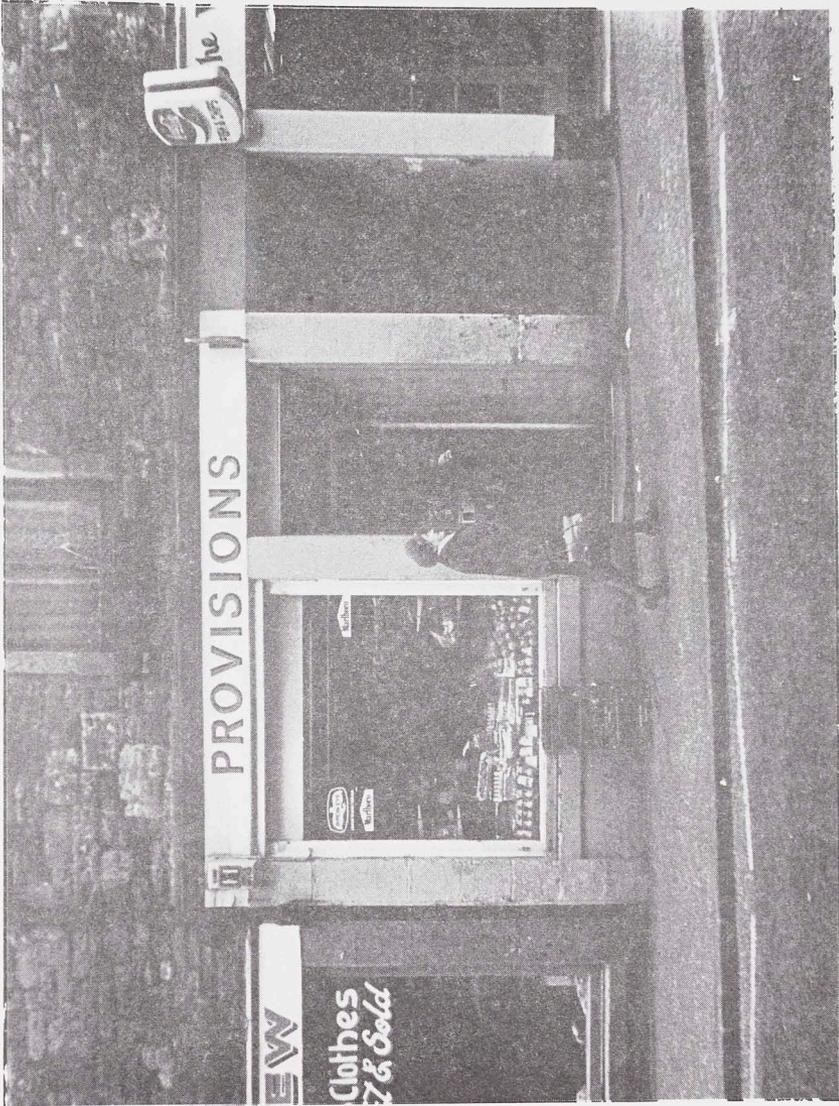
I had two aims in making this record. Firstly to record the different types and styles of shop premises; secondly to obtain a picture of the shopping patterns outwith the world of the supermarket and chain store. The areas covered were the minor streets in Dundee town centre, the main shopping streets radiating out from this, and the suburb of Lochee. Unfortunately, through lack of time, Broughty Ferry had to be excluded.

The survey showed a variety of shop premises ranging from brick sheds and odd building infill, to large, late 19th C. units, designed as part of a complete block facade. Three basic types of premises were apparent, each of which fits roughly into a particular period of time. The first type, which generally is to be found in the oldest buildings, is an adaptation of a dwelling house. Few of these have survived modernisation. Those remaining are single or two-storey cottages situated on streets on the outskirts of the city's 19th C. expansion. Originally they served a semi-

rural community and it is noticeable that most of them are still general stores. (Figure 1). The second type extends this custom. In the older inner city streets and Lochee High Street there are rows of plain and modest tenement blocks in most of which the ground floor flats have been converted for use as shops. These were generally built before 1870. In size they are small, usually a one-flat unit, the interior being divided into a larger service room and a tiny back shop, utilising the kitchen plumbing and gas supply. The shop frontages are very plain, with only a minimum of moulding to separate them from the rest of the building. The windows are almost square and occupy a large proportion of the facade. There is no evidence that any of the existing shops have had their windows enlarged (Figure 2).

The third type is a larger sized shop unit built on a much more impressive scale which is to be found in the block developments of the late 19th C. These buildings were erected either by individual prosperous tradesmen or, more frequently as time went on, by building and property investment companies. These are deeper and considerably higher than the earlier shops and double frontages appeared in them for the first time. In the larger examples, also, the door recess was put to use for display purposes and was then protected at night by an iron or wood-work gate instead of solid doors. (Figure 3).

Apart from these three basic types, there are a number of specialised buildings scattered around the town. Such shops are almost invariably found on sites which were left vacant when the tenements were built. In structure they are either low brick sheds standing on their own (Figure 4) or infill between two tenement blocks. (Figure 5). Occasionally structures, built for other purposes are put to use as shops, for example, the former tramway stance on the Lochee Road at its junction with Dudhope Street, a wooden hut which did duty for many years as a newsagent's. (Figure 6.)



2. 178 Blackness Road. Small scale shop in ground floor of tenement.



3. 145 Lochee High Street. Large premises in late 19th C. tenement.

Very few premises are without some form of decoration to draw the eye of potential customers or to define the boundary of the shop frontage. This definition can be achieved in two ways. Firstly with colour, ie. paint, which is a temporary feature and can be changed by the shop tenant without any great difficulty, and secondly with three-dimensional mouldings, which are a permanent architectural feature of the whole building.

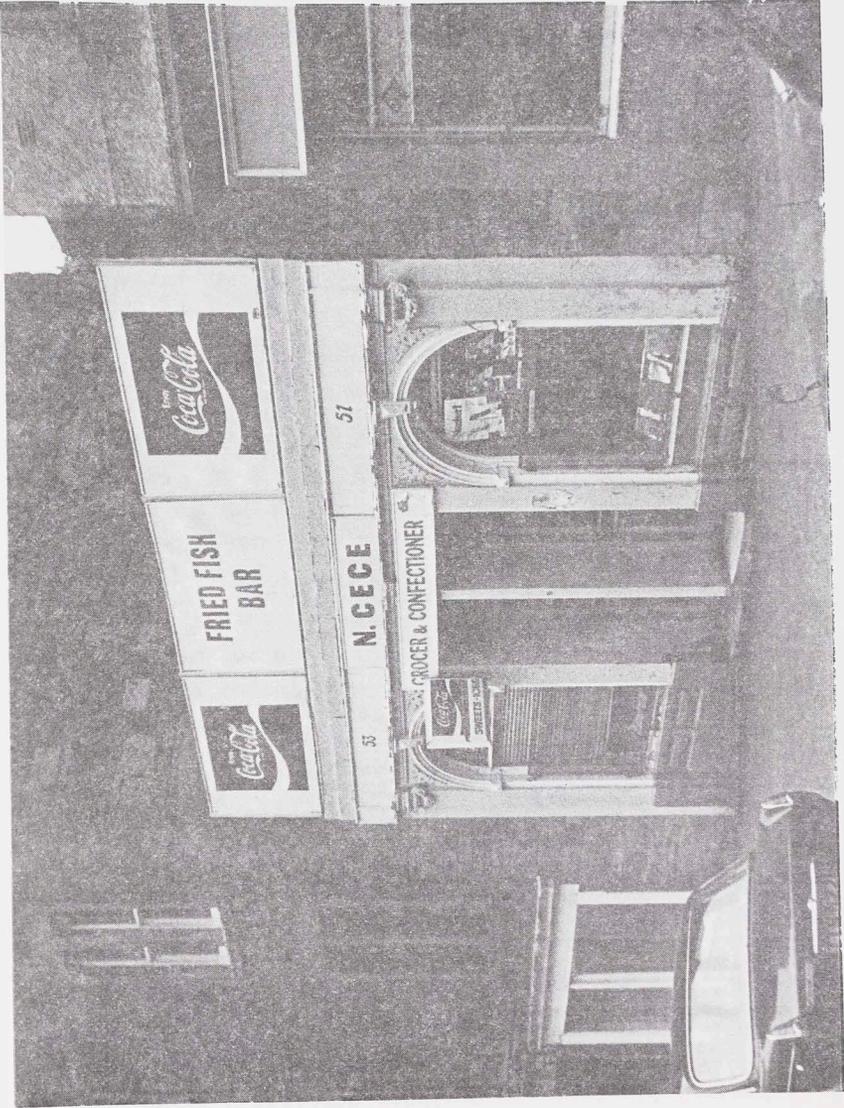
The simplest way in which colour is used is to paint all the stonework of the facade, thus neatly dividing each property from its neighbour. Shades of grey and cream are the commonest but in recent years a few shopkeepers have gone in for bright or dark colours. It seems to be the case that these bright colours are found together because where one shopkeeper takes a lead in this, his neighbours must needs follow suit to avoid appearing dull and shabby by comparison. The brightest colours in Dundee are in Lochee High Street, where the shops are painted in shades of green, yellow, dark brown, orange, purple, dark red, white and black.

Colour is less important in the late 19th and early 20th C. buildings. The decoration here is three-dimensional, in mouldings and elaborate window frames, and so even if the colour of the paintwork varies, the building retains its architectural unity. The colours used to paint the facades of such shops are almost always neutral or on the dark side, maintaining the tastes of the time when they were built. It should be noted that the elaborate mouldings and framework of these later shops were prefabricated to standard patterns in wood and cast iron. (Figure 7).

Apart from the functional paintwork, colour appears on shop fronts in a variety of decorative forms, mostly for advertising purposes. Painted stonework provides a good surface for signwriting. Most shopkeepers prefer simply to list the range of their wares on their walls and to add, perhaps, a laudatory slogan or two, but a few are more daring



4. 215 Blackness Road. Brick shed in gap site.



5. 51 Cleghorn Street. Elaborate facade on building in-fill.

and put up a picture or symbol, as often as not a bit amateurish in execution. (Figure 8).

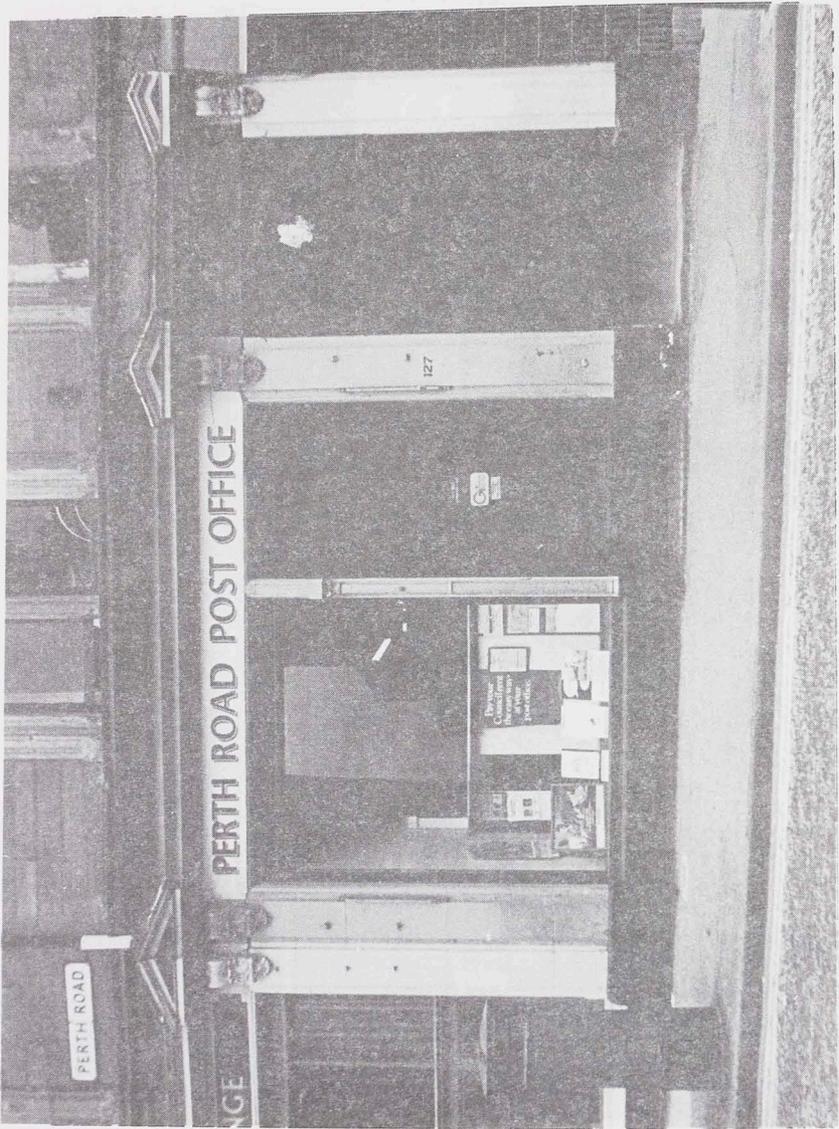
Almost every small shop has a wooden fascia board painted with the name of the shop and possibly the type of trade carried on there. The styles of script show considerable variety even though the number of signwriters in the area is small. Most shopkeepers keep their fascia boards in good condition, the actual lettering often being maintained over a considerable period of years. In addition, some shops make use of a transom board above the window to carry a painted symbol of their trade. (Figure 9). Window blinds can be treated in a similar way. Both these methods of decoration are favoured by food retailers who must protect their perishable goods from the sun or remove them at night. Rather than present a blank face to the world, they make use of the space for a little extra advertising.

Paint can also be used on glass. Gold lettering is found on the doors of a few shops, most noticeably on bakers' and clothiers'. The most fanciful examples of glass painting occur on the premises of long established painters' and decorators' who took care to advertise their skills on their own shop frontages. (Figure 10).

There are very few examples of stained glass in Dundee shops and the majority of these are non-representational, geometric patterns. Stained glass is an expensive material and is only found in the larger sized shops. (Figure 11). Etching was a less costly way of decorating glass panels. Etching renders glass opaque and thus unsuitable for display windows and so in retail shops is only used on door panels or subsidiary windows. Such window decoration is not common and is confined to late 19th and early 20th C. premises; it has been used to great effect in public houses but few of these in Dundee have retained their original windows.



6. *Lochee Road tramway stance.*



7. Blythewood Place, 183-131 Perth Road. Tenement block with continuous moulding across shop frontages.

Ceramic tiling was once common in butchers', fishmongers' and dairies, all of which require to be kept cool and clean. With the advent of cheap refrigeration it has become rare. It was not normally featured on the shop exteriors but in a few premises the tiled design was extended to include the doorway.

Dundee, in common with other towns, once had a large number of traditional symbolic shop signs. Only a few remain (1). At present there are one pharmacist with a mortar and pestle, two fishmongers with gold-painted fish, and an optician with a giant pair of spectacles; the one remaining pawnbroker's sign (with one ball missing) will soon be removed as the building is due for demolition (2). In the centre of town there are two models of Dundee's former Town House, the Pillars (demolished 1931), one on top of a restaurant clock and one outside the public house of that name.

The small traders cannot afford to employ professional window dressers, but about half of them still take pains to produce an attractive and eye-catching display. Some adopt the oldest and simplest style of display, which is to pile the window full with as nearly the complete range of their goods as is possible. Greengrocers and confectioners produce attractive windows in this way. The greengrocer and the ironmonger are the only trades which still use the pavement outside to extend their display. (Figure 12). In the 1920's window dressing first came into its own as an art. The traditional piled-high window was despised as old fashioned and new, carefully arranged and proportioned thematic displays were thought to be the best advertising, even for the small shopkeeper. For the small trader, this "art" window approach has the disadvantage that it requires a continuous outlay on

-
1. *A small number of traditional signs have been collected by Dundee Museum.*
 2. *The pawnbroker has recently opened a new shop and has put up outside a small version of the traditional sign.*

props such as backing boards, shaped stands, curtains or covering papers and fancy labels. Only a very few shops in Dundee, notably some bakers and one coffee merchant, still prepare their windows on these lines.



8. 156 Lochee High Street. Painted outside walls.



9. 158 Lochee Road. Pictorial transom board.



10. 276 Perth Road. Pharmacy and optician's symbols in stained glass.

Robert Purvis

NOTES ON HOUSES IN SOUTHERN SERBIA - 1943-44.

Area North West of Vranje (Oruelica) and Area South-East of Vranje (Kosjac, Trgoviste).

In the poorer out of the way places the houses comprised a single room. Wall construction was a wooden frame infilled with wattles of interwoven branches and covered with mud daub. This was sometimes whitened from a deposit left by the hot springs found here and there. In the centre of the room there was a four feet square in the earth floor for the fire. This was usually contained within a stone kerb. The local fuel was wood. Windows were very small but usually glazed. The door usually faced onto an overhanging veranda, which housed the bedrolls and other gear not wanted in the room during the day. I favoured these thin interwoven bedrolls as being far less verminous than the more pretentious beds with mattresses stuffed with maize husks, found in the better houses.

The roof was timber framed and thatched. There was no chimney, the smoke finding its way out through the thatch, which on the underside was a shiny pitch black as were the wooden couples. I understand that if a house was left unfired for any length of time, that the thatch got wet and soggy and fell in. This also applied to the *black houses* on the west coast of Scotland.

Cooking and baking methods were most interesting. They had a circular shallow earthenware dish of about eighteen to twenty inches in diameter with a two inch rim. It also had a small hole in the centre. This dish was heated in the wood embers. A poker with a bent end was put through the centre hole in the dish which was then carried over to a corner of the room and placed on the earth floor. The dough for the rye bread was placed in the hot dish which was covered with a metal *dust bin lid*. The whole was then heaped over with hot

embers from the fire. In half an hour you had a beautiful crisp flat circular loaf. They cooked meat and vegetables (DUVETCH??) in the same way. Delicious.

The better class houses in the hilly districts were often two storey, making use of the falling ground on the one side. The stock occupied the lower portion. The upper portion for the family often had two rooms.

The construction was again wood frame and wattles covered with mud daub. The foundations and live stock quarters were of stone. The beams forming the ceiling of the stock quarters/floor of the family living room, were fairly closely spaced and filets were nailed lengthwise along these beams to support split wood in-filling. This was then covered with earth. There was usually a fire with a chimney at one end of the house where it could be on solid earth. Split wood shingles were sometimes used instead of thatch on the roof.

There were usually quite a number of small outhouses or shed in the compound. One always housing the still for Rakia - Slivovitz. This was usually made from small plums. In bad years for plums, wild pears were used. The small poorer places simply mashed the plums and put the mash through the still. Better class places put the fruit in vats and let them ferment for some months before distilling. The results were very superior.

Geoffrey Stell

STAIR-OUTSHOTS IN WEST FIFE

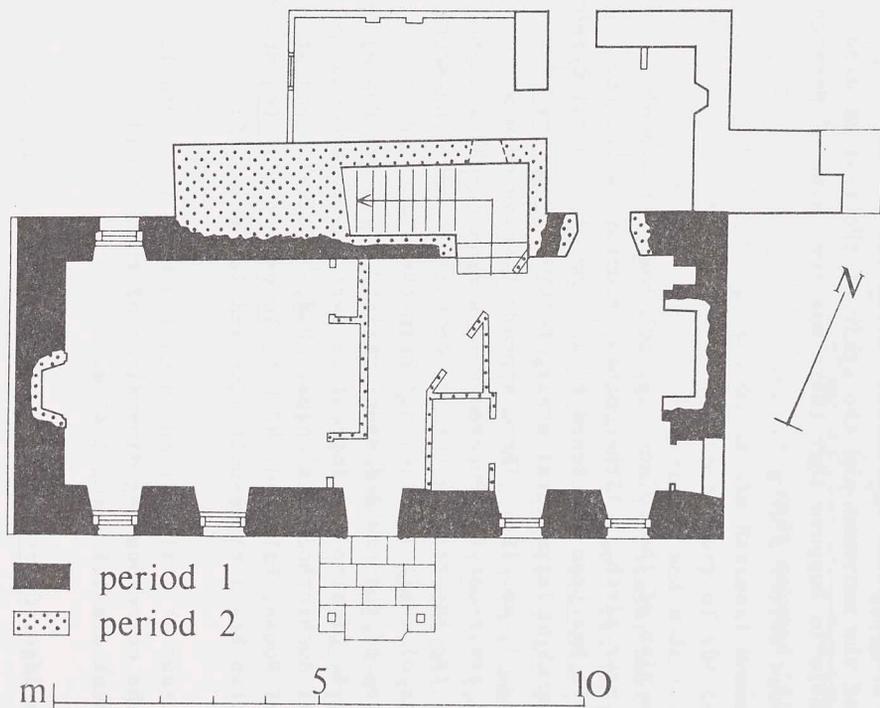
The purpose of this brief note is to place on record an interesting variation on the general theme of early 18th-century stair-design in lesser lairds' houses. The feature in question is a laterally extruded rear outshot incorporating a straight scale stair associated with each of two buildings in Dunfermline District. The two houses are situated at Blairhall (NS 996 876), some two kilometres north of Culross, and Old Shieldbank, formerly Sandydub (NT 010 937), just over one kilometre north of Saline Village and six kilometres north north-east of Blairhall. The buildings have been investigated for different but purely accidental reasons, and it is by no means unlikely that systematic research could reveal surviving examples of a like kind elsewhere, particularly in and around the Forth Basin (1). The two stair-outshots are of similar character, construction and date; they also occupy similar positions, creating in each case what might be described as a compressed T-plan layout, but they are fronted by house-plans which superficially appear to be of different kinds, and at Blairhall the stair is clearly in addition to the house as first designed (2).

At Blairhall (fig.1) the late 17th-century two-storeyed main block survives as an oblong symmetrical five-bay structure measuring 13.3 m in length by 5.8 m transversely over walls 0.9 m in thickness. The centrally-placed doorway has a bolection-moulded surround and the original windows have plain offset margins with chamfered arrises. Other external features of note include crowstepped gables, cavetto-moulded skewputs and a weathered plinth on the west gable. On the rear elevation the stair-outshot which has been lit by a series of chamfer-arrised windows, has itself been built against the blocking of an original window of similar character at the west end of the main block. The interior has been much altered as a result of later 18th and 19th century remodellings particularly in and around the central entrance-lobby, but the position of the original kitchen is

readily identifiable by the size of the (altered) fireplace opening in the ground-floor east wall, and a fireplace with an original bolection-moulded surround still serves the first-floor west apartment. The more significant later alterations to the building included the removal of an east wing of unspecified size (3) and the addition of a $1\frac{1}{2}$ -storeyed outshot and brick sheds against the north-east wall and stair-wing. Despite superficial appearances, therefore, the position of the secondary stair (wherever the original stair might have been) and the accommodation provided by the erstwhile east wing would suggest that the house does not easily fit the accepted norm of a two-unit symmetrically-planned laird's house.

The same is true of Old Shieldbank (4), but in this case the tell-tale position of the entrance-doorway in the penultimate west bay of a five-bay facade immediately pinpoints its asymmetry, and the existence of a chimneyed mid-gable provides a ready external clue to an internal three-unit plan. The house is an elongated rectangular block of two main storeys measuring 15.1 m by 6.25 m over walls 0.61 m in average thickness. It has an elaborate lugged bolection-moulded door-surround with a panel above inscribed 'W.T., K.H. 1722', a date that coincides reasonably well with the earliest features of the existing house (5). The building is otherwise comparatively unadorned : the windows on the principal south frontage have plain offset margins with rounded arrises, the skewputs and eaves cornice are wrought with ogival mouldings and those chimney-stacks that remain unrebuilt have moulded copes and a drip-course or verge to accommodate the original (thatch) roof-covering beneath. The interior has been thoroughly reorganised and re-fitted in the course of the 19th century, a re-arrangement for flatting purposes that involved among other things the construction of an internal stair and the removal of a ground-floor partition. Apart from the original stair itself with its moulded stone treads and its associated doorway - and window - openings in and around the stair-outshot, the only other feature that clearly reflects the early functional arrangements is the capacious (kitchen-) fireplace, now accommodating a boiler, in the ground-





BLAIR HALL HOUSE
 (RCAHMS: copyright reserved)

-floor west apartment. From the surviving evidence, it seems reasonably clear that the entrance-doorway gave onto a short corridor that ran along the inside of the south wall and served the two east ground-floor apartments. Given the relative disposition of the entrance and the stair at the rear it also seems reasonable to suppose that there was some kind of passage or 'cross walk' between them.

NOTES

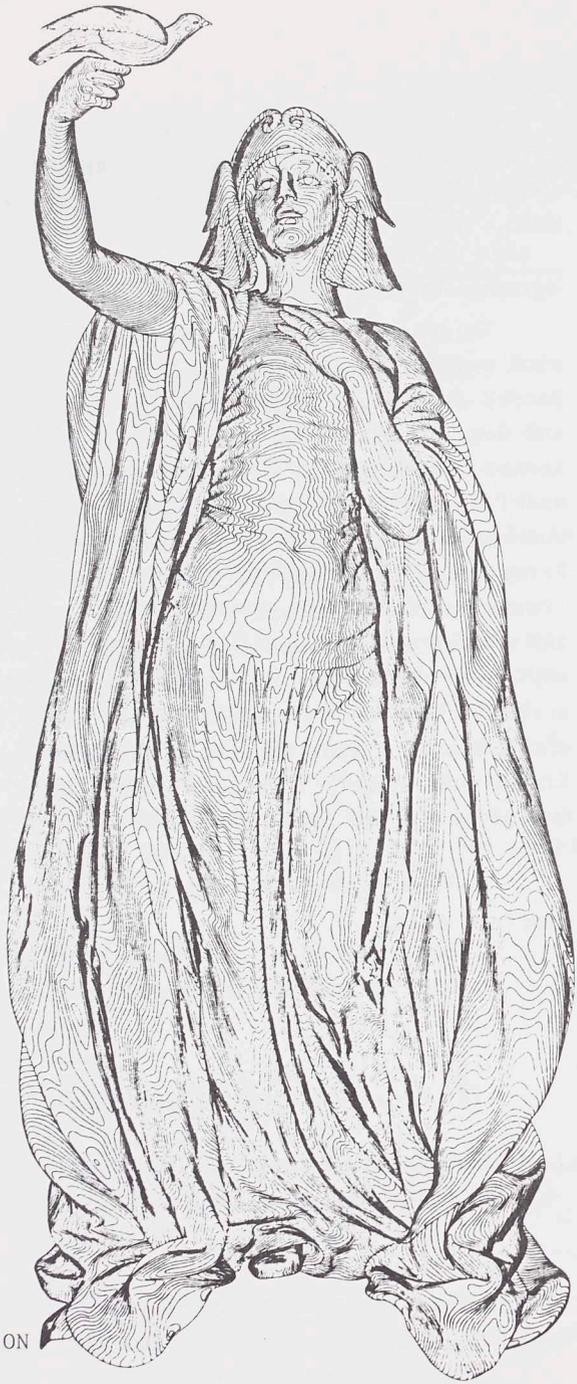
1. Cf. the plan of the ruinous Carnock Tower or Bruce's Castle near Airth, a 15th-century structure where the west wall has been thickened to accommodate a mural chamber and a straight intra-mural stair, RCAHMS, Inventory of Stirling, i, no. 196. There appears to have been a lateral stair-outshot covered with a crowstepped lean-to roof in the interesting but now-demolished building known as Barns of Crail in Fife, but here the stair appears to have been of the rounded newel variety, Cast and Dom Arch., iv, 125-6. Cf also the lateral proportions of the stair-tower at Auchterhouse in Angus, *ibid*, v, 229-32, and at Moncrief House, Falkland, RCAHMS, Inventory of Fife, no.239, which also has a three-unit plan and is date 1610.
2. The outshot at Blairhall measures 7 m by 1.3 m overall, while the corresponding dimensions of that at Old Shieldbank are 4.1 m and 1.45 m.
3. D. Beveridge, Culross and Tulliallan (1885), ii, 32.
4. Drawings of Old Shieldbank are in the course of preparation and will be deposited with the National Monuments Record for Scotland.
5. An incomplete architectural fragment bearing the initials AS, BS and the date 1686 has been built into one of the dykes adjoining the steading, but does not appear to relate to any of the surviving buildings.

BOOK REVIEW

Peter Fowler, FARMS IN ENGLAND, PREHISTORIC TO PRESENT,
(Royal Commission on Historical Monuments, (England).
HMSO, 1983.) £4.95

This picture-book is the fifth in a series based on the rich collection of photographs in the National Monuments Record in London. The author is Secretary of the Commission and General Editor of this enterprising and modestly-priced series. As might be expected, this particular book is a model of its kind. It contains 97 + 1 well-chosen plates concerned with 'Farms in Context', 'The Farmhouse', 'The Farmyard', 'Crops on the Farm', 'Livestock on the Farm' and 'Farms in the Landscape'. There is a short introduction, and the plates are accompanied by brief but very informative captions. Emanating as it does from an organisation that normally records 'monuments', this book (and the series) has a refreshingly wide approach. Humans, animals and machine figure prominently in many of the plates, and are given their due place in the farming story.

Geoffrey Stell



CONTOUR ELEVATION

Ingval Maxwell

PHOTOGRAMMETRY - AN EXPLANATION AND ASSESSMENT

Invented in Germany in 1866, Photogrammetry is essentially a mechanical method of plotting scaled drawings from stereometric pairs of photographs.

PRINCIPLES

Provided basic survey data and scale checks are incorporated with images of the overlapping areas of stereo photographs, each object point appears on the individual photographic plates in a relative form. The points recorded, in the same manner as when viewed by normal vision, appear in positions which can be related to their surrounding points, and when viewed jointly by both eyes, appear in three dimensions in a way which can be calibrated. The difference of position of the points, or images, in the two photographs depends upon the distance from the camera to the subject. The greater the distance the smaller the difference until, at infinity, there is no difference at all. This difference in position is called parallax and is the basis of stereoscopic observation and measurement.

In photogrammetry, stereophotographs can be taken by a vast array of instruments each ideally suited to their own particular purpose. For terrestrial work two cameras are mounted on a fixed dimension bar or, in some cases a mobile individual camera can be utilised, much in the same way, as a single camera is utilised in a mobile position whilst carrying out vertical overlapping air photography. Once recorded, and developed, the photographic images are placed in negative form, for accuracy, into the plate holders of a plotting instrument. Within the instrument, to insert accuracy, appropriate corrections are made to relate the plates to the base survey data and a stereoscopic image is formed by viewing the overlapping sections of the photographic images through an optical system of prisms

and lenses. Within the optical system, measuring marks are combined and projected into the viewed stereoscopic image to appear as a floating mark which can be moved in and around the photographic stereo model in three dimensions. Plotting from the photographs is achieved by setting the floating mark on the object details recorded and guiding it around the photograph, in plan, by using two hand wheels set to operate the mark in its "X" and "Y" axis and, in elevation, by a foot disc in its "Z" axis. As this is carried out, a mechanically linked arm traces a drawing pen across film, set out on the plotting table, which is placed adjacent to the viewing machine, to produce a scaled drawing, machine corrected, from the survey photographs. Due to their complexity, plotting machines are expensive but are available in varying degrees of sophistication - the more complex being capable of a link to computer terminals and other attachments.

APPLICATIONS

As it has developed, photogrammetry has been used in a vast range of applications. In essence however, it can be subdivided into aerial photogrammetry and terrestrial photogrammetry.

Aerial work can provide information on the civil engineering sphere by giving deformation measurements, earthwork quantities and progress surveys into highway, bridge and tunnel construction. It can also be used in forestry to study the growth and shape of trees and give assessments of timber volume. Primarily however, it is used predominantly for map making. In this aspect, considerable advances have been made possible as a result of high resolution cameras and revised methods of approach. Predominantly however, the need still remains for overlapping pairs of stereometric photographic images. Plotting techniques have long been in use to produce the peripheral plan of buildings and contoured interval maps. When necessary, additional information can also be added in the form of building roof profiles, tree positions, and individual spot heights. By

extending a run of spot heights along a defined line, or a particular route, a vertical section can also be produced from the same photographs. By varying this theme and taking spot heights at corners of buildings, and any other height variation points necessary, a composite section can be built up in such a way as to produce a townscape elevation. Further refinement and adjustment possible in some plotting machines can put this townscape elevation on an angled projection and thereby use the same information to produce axonometric drawings.

Terrestrial photogrammetry, like aerial photogrammetry, has also a vast range of uses. It can, for instance, calculate animal body volumes in animal husbandry, be used in the medical profession for anthropological and ethnological studies and has been used in conjunction with X-ray photography. In industry it has been used for the accurate measurement of prototypes, hydraulic and deformation studies and is used common place by many Police forces on the Continent for the gathering of evidence in traffic accidents and criminal investigations. As an extension of aerial techniques, terrestrial photogrammetry has been applied with considerable variation when dealing with historic structures and detail on an international front. Terrestrial building surveys have contoured rock sculptures, produced townscape elevations, and entire plan, section and elevational details of individual buildings. It has also been used successfully on archaeological recording work and on the detailing of found artefacts, both by contour and aris detail plotting.

In Britain however, as few academic and public bodies are fully equipped to carry out photogrammetric surveying, the majority of work can only be achieved by contractual labour and it is decidedly the case that you get what you pay for.

DIFFICULTIES

Although quick in its ability to produce overall survey details there are basic problems which should always be borne in mind.

Primarily in letting a contract it should be remembered that the Contractor is in business to make a profit from his operations. This can lead to corners being cut when producing the final drawings and in making assumptions where details are unclear on the photographic plates. It should be emphasised that, when the stereo camera is on site, it is always best to record a greater degree of detail than what may be necessary for the final survey as it can prove to be a costly mistake to find out during the plotting stage that insufficient detail has been photographed to adequately produce the drawings required. On site photographic work is also fraught with practical problems. Strong shadows, building overhangs and steeply sloping ground can all add to the practical difficulties of carrying out the photographic survey in the first instance. Once plotting starts, plotter interpretation, or misinterpretation, can further confuse the issue. This can be exacerbated when a drawing is required to be produced at too great a scale from the available photographs taken.

SOLUTIONS

As far as possible, the client/contractor relationship should work hand in glove during the drawing up stage but, due to the general remoteness of the contractors, this is not always possible. The basic need is to make sure that the photographic coverage is sufficient for the degree of detail required from the survey prints both for the initial drawings and for any potential future survey which may be required from the same prints. Shadow defects can be eliminated by waiting until the correct time of day, or until more appropriate weather conditions are available, to ensure that there is a general overall defused light on the photographed subject. Where this is impossible, additional artificial infill light may be required and, of course, this is necessary when taking any internal shots.

Building overhangs can, to some degree, be taken account of by the variable degree tilt on some camera instrument heads which can be catered for in the plotting instrument. This however, is not always sufficient and it may be required to erect a mobile scaffold (on the assumption that it can track along the building facade) to provide the various camera stations necessary to give the overall photographic coverage. If this proves impossible, then a more permanent scaffold structure will be required and this can considerably escalate survey costs if the scaffold is excessive. It can also somewhat limit the degree of photography if, for example, there are a number of scaffold tube uprights encroaching on to the buildings face thereby obscuring detail.

In some areas, such as passageways, where there is insufficient space to stand back from the building facade to take the overall coverage of photographs necessary to give a true elevational drawing, this can be overcome by setting up an additional camera station at either end, or at intermediate points, in the passageway and take 180° opposing views of the same wall face. At the plotting stage, what can be clearly seen from each stereo pair of photographs can be individually drawn up and the 2 sets of drawings registered together, as an overlap, to provide the complete drawing. Base information of a sufficient degree is of course necessary to ensure an accurate match.

Cost will always, to a great degree, dictate the solutions and difficulties to be encountered. One method of ensuring that the client only pays for his needs is to obtain, at the pre-plotting state, duplicate sets of photographic prints from the survey negatives. The areas of the building required to be drawn up can then be coloured, on these prints, with a light coloured ink wash and a set returned to the Contractor to work from. The proviso that "everything coloured or tinted must be plotted" could always be made. Laziness and shortcuts taken during the plotting can be checked over, to some degree, by asking for an advance copy of the drawing to be provided prior

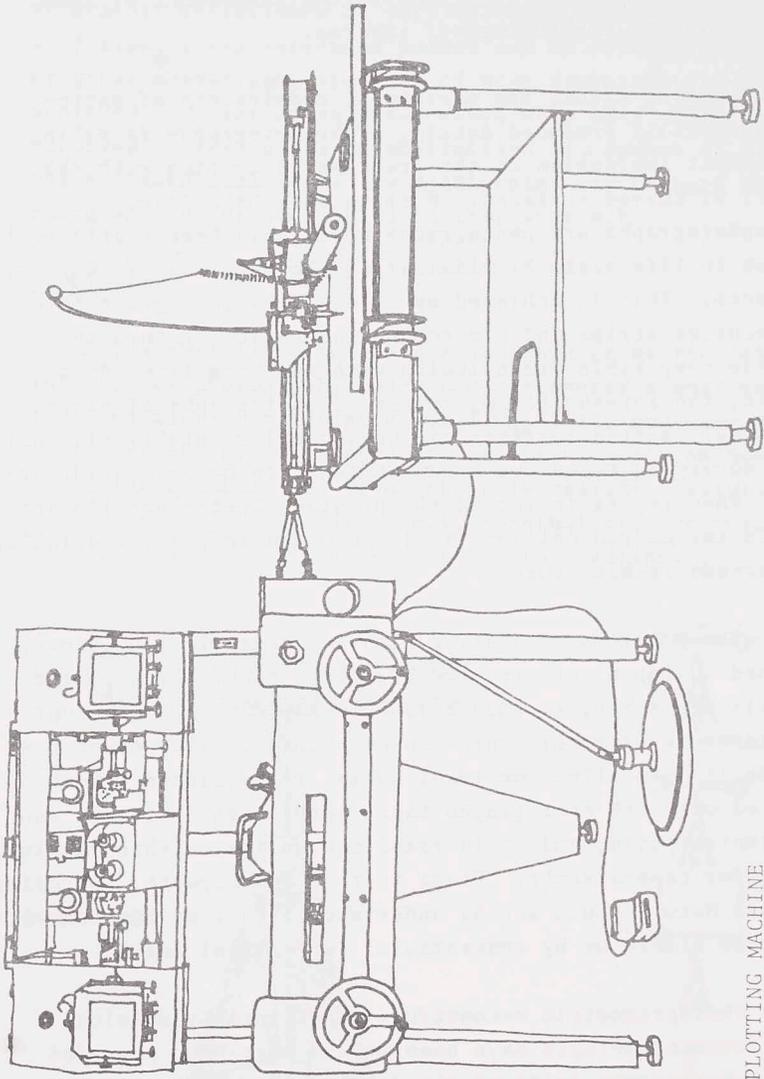
to accepting the finalised sheet. By working over that copy with the stereo pairs of photographs to hand, discrepancies can usually, but not always, be noticed. It is however, an unfortunate fact of life that the accuracy of any survey drawing will only be adequately tested once physical work, based on that drawing, is tried out on the building or the object.

VARIATIONS

Due to the ability of the plotting machines to digitalise the co-ordinates of all movements on the "X", "Y" and "Z" axis, computerisation of photogrammetric surveying is the most likely major advance to be seen in this sphere over the next few years. When fully developed, this system will allow a speedier recall of all plotted information and will, in itself, be multi-disciplinary. Scale variation will be possible at a touch of a button, storage problems and retrieval difficulties will all but be eliminated.

Thermal lance modelling, by contouring through solid blocks of polystyrene or other plastics, is also possible. In effect, the lance replaces the plotting pen and the polystyrene block is positioned in lieu of the drawing table. By operating the plotting machine, in the relevant "X", "Y" and "X" axis, the lance advances into the plastic block the appropriate degree with each adjustment. On completion of contouring or describing the stereo model, a physical scaled model can be reproduced at the end of the exercise.

The ability to photographically record temperature differences by Thermography opens up a new sphere of building interpretation and analysis when linked to photogrammetric surveying. Contained within a plotted surround Thermography readouts can indicate the positioning of stud work in partitions and beam work on timbered framed building. Development however is still in its early stages.



PLOTTING MACHINE

With its ability to see beyond the visual range, Infra Red photography is also being used to a greater degree. Predominantly this is occurring in the assessment of land use and in the archaeological spheres.

Working within the peripheral constraints of photogrammetrically produced detail, orthophotography is making a distinct impression on the problems of dealing with the survey of curved surfaces. Working to a base line, orthophotographs are photographs which have been rectified to a true to life scale by eliminating the parallax of the curved surfaces. This is achieved by slicing the photograph into consecutive strips and stretching each slice in turn to achieve compatible dimensioning with the base line. As a result, the foreshortening curves of photographs of barrel and other vaulted surfaces can be virtually totally eliminated. This surveying technique has been found to be of considerable value when trying to record the painted plaster details set within the curved ceiling panels amid ornate plaster detailing of Baroque architecture.

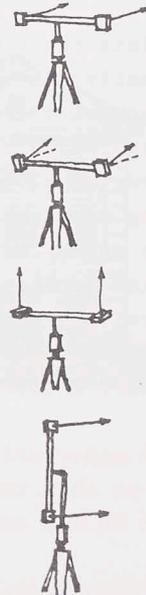
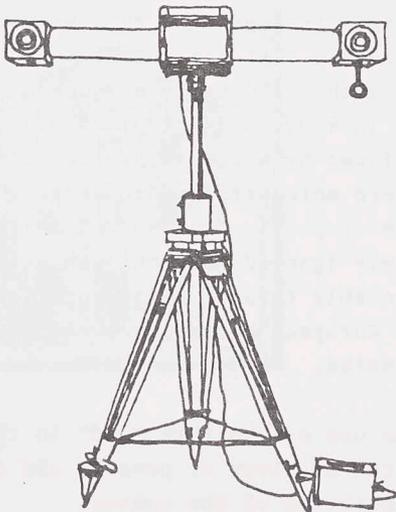
The problems of dealing with inaccessible elevations, perched on top of cliffs, and of obtaining highly detailed overall plans has, to some extent, been overcome by recent developments with helicopter camera mounts. This mount has the ability to allow low level aerial reconnaissance to be carried out with photographs taken both on the vertical and horizontal plain, and at intermediate angles, without having to suffer camera shake. Prior to this development, surveying of this nature could not be undertaken by either the conventional airborne camera or by conventional terrestrial means.

Photogrammetric reconstruction of totally missing architectural details have been proved possible, provided early photographs exist of the details in question. By recreating the original camera viewpoint, and taking stereometric photography to match the original photograph, it is possible to substitute the original photographic detail into the plotting

machine. By using common overlapping areas of remaining build, the missing degree of building can be reasonably accurately established in outline elevational form. Provided sufficient cross reference points can be established on the original photograph, elements of plan dimension can also be achieved. Recent notable successes with this approach have occurred following the reconstruction of a number of missing onion shaped domes on a few continental war damaged churches using working drawing based on this approach.

CONCLUSION

The ability to build in measurable geometric details into survey photography makes photogrammetry a most valuable tool and asset yet, despite its flexibility and many applications, it is not the ultimate approach or system. It can however, offer the quickest and often the only realistic solution to many surveying difficulties but, nonetheless, the results should always be treated with a healthy caution.



Jean Dethier. DOWN TO EARTH. Mud architecture: an old idea, a new future.

Thames and Hudson, London, 1982.

ISBN 0 500 34090 0.

£9.95

Dethier has selected 303 illustrations, 65 of which are in colour, from the exhibition "Architecture de Terre" first shown at the Pompidou Centre (28 October 1981 - 1 February 1982) to illustrate various forms of architecture constructed from consolidated earth. The selection ranges from the free-flowing sculptural forms of African tribal huts to tenement buildings and multi-storey cotton mills in Grenoble, France. He also deals with recent applications of the technique to a range of buildings including : a group of luxury houses in Albuquerque, New Mexico; new villages in Algeria and China and hospitals in Africa. Down to Earth is not a text book for do-it-yourself builders but presents a serious visual exploration of the architectural potential of consolidated earth as a building material in all parts of the world.

This feast of visual images is augmented by a short, informative and extremely readable text giving the development of consolidated earth building techniques over the last two hundred years. The lack of building plans and constructional details is off-set by a select bibliography listing many publications where more detailed information can be found. Northern Europe is poorly represented in the book and Scotland is completely ignored, not through a lack of surviving examples but probably through a lack of visual excitement apparent when the European buildings are compared with more exotic African examples.

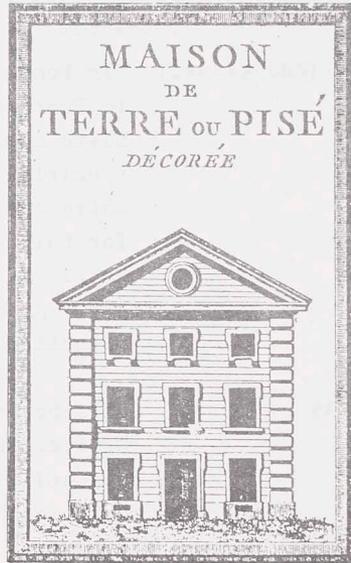
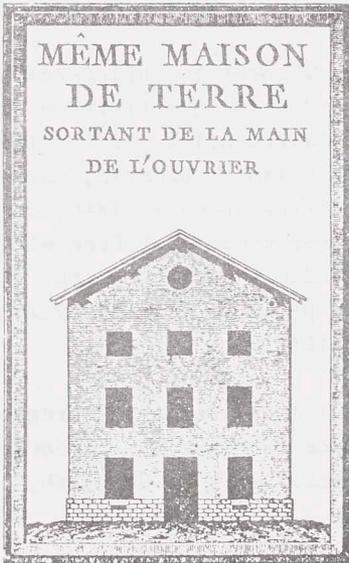
A minor criticism is the use of the term "mud" in the title as this tends to have connotations of poverty and squalour and in no way reflects the intention of the author.

Consolidated earth, a much more accurate description of this building technique, was held in high regard by early

nineteenth century improvers throughout Europe, but the labour intensive nature of the technique made it expensive to use in most areas of Scotland, hence the limited survival pattern.

This is a book to stimulate thought and visual appreciation of this most versatile building technique bringing a wider perspective to the study of this subject.

Bruce Walker



Joan Auld

NOTES ON SURVEYS OF THE NATIONAL REGISTER OF
ARCHIVES (SCOTLAND)

These notes have been adapted from the summaries of surveys printed in the Annual Report of the Keeper of the Records of Scotland. Members are reminded that the collections mentioned are held privately and all further enquiries including applications for access must be made through the Secretary, The National Register of Archives (Scotland), H.M. General Register House, Edinburgh.

The author would be interested to hear of any hitherto unlisted collections known to members and such information should be addressed to the Archivist, University Library, Dundee.

- 26 (Additional) Sir Donald Cameron of Lochiel, Papers relating to Scottish Slate and White Quartzite Co. and Slate quarrying at Ballachulish, 1864 - 1973; specifications of new inn at Banavie, Inverness-shire and related correspondence, 1846; contracts for buildings and improvements at Lochiel Arms hotel and other buildings on the estate, 1858-1860. Architectural plans of Achnagarry and outbuildings, 1837-1847.
- 2045 Strathclyde Regional Archives, Ayr Subregional Office. Lumsden White of Dankeith : accounts for building and estate work at Dankeith, Ayrshire, 1881-1886.
- 2123 Dundee University Library. Papers of John E. Lacon's Trust : specifications and estimates for supplying or repairing water wheel at Duntrune Mill, Angus, 1905.

- 2132 Arthur Nicolson, building contractors, Letham. Miscellaneous plans of buildings in Angus, especially steadings and cottages on Dalhousie estate with related papers. 1862-1915.
- 2137 Mr. Hugh Sim, Birnam. Photographs of cottages, houses and other buildings in the Dunkeld area, 1867-1930.
- 2234 Major D. Crichton-Maitland, Houston House. Papers relating to Elderslie estate, Renfrewshire including water colour sketch of Burntrae steading, c.1800; plans of farms of Bridgend and Stepends with sketches of steadings, 1833; elevations and details of schoolhouse, Renfrew, 1858; plans of various steadings, c.1882-1969; plans of cottages, 1901-1930.



John F. Partridge

SETTLEMENT PATTERNS IN THE SPEY VALLEY

Little is known about settlement patterns in the Spey Valley before 1745. Some information can be gathered from present and previous editions of the ordnance survey map and other earlier maps but the remains of these settlements which have been abandoned are not dateable from surface indications and a research programme on their history and location would be of value.

Then as now, there have been two main determinants in the location of settlements. The first of these is, as is common throughout Britain, the location of river crossing points and the second is the geomorphological basis for the human use of the land. In cross section, the upper valley of the Spey within Badenoch and Strathspey district falls into three parts. Today, the lower level, the flood plain itself, varies in agricultural quality from good arable land to bog with a gradual transition from the former to the latter starting in the general area of Aviemore and thence declining upstream. Bordering the flood plain is a steep bluff above which is a relatively flat area which has formed the main belt of cultivation. This belt is of variable width and gradient and is bounded on its upper extremities by the Monaliadh and Cairngorm massifs. Traditional settlements in the valley appear to have been generally at the junction of the upper limit of this intermediate flat area with the mountainous areas. By contrast, those settlements which were founded or developed after 1745 appear to have been mainly at the junction of this intermediate area with the bluff to the side of the flood plain.

Following the '45, the urban growth of the Spey Valley began. Growth has since taken place in three phases, each started by an externally applied stimulus, and most of the phases taking place in a "planned" form. The first phase began toward the end of the 18th century and is thus coincident in time with the

planned-towns movement of the north east of Scotland from whence the inspiration appears to have come. All the present day settlements in the valley apart from Aviemore were planned in this phase; the foundation dates of these settlements being :

Grantown	1765
Skye of Curr	1796
Kingussie	1799
Carrbridge	about 1808
Newtonmore	about 1815
Insh	about 1826
Lynchat	1830's

Of these, Grantown is a planned town in the full north east of Scotland sense, with a straight wide main road leading to a square and with service roads running parallel to and on either side of the main street. By contrast, the new towns of Kingussie and Newtonmore were planned on a much more restricted basis, neither town being provided with a square except for a small space in front of the Court House in Kingussie and with the partial elimination (sometimes for land form reasons) of the rear service roads. It is interesting to traverse the valley of the Spey from the sea to Newtonmore and to see the gradual lowering of standards of planning and building construction in the course of this traverse. The older core areas of Grantown, predominantly two and three storey stone houses, can be contrasted with the older parts of Newtonmore, which are often a single storey form only. Coincident with this phase of urban growth appears to have been the progressive abandonment of earlier agricultural settlements. It is not known whether there is a causal linkage between these two elements and the position is further complicated by the emigration from the Highlands which took place at roughly the same time. The majority of these settlements were planned as improvements to the owners' estates and therefore locational criteria which had previously applied would not necessarily be as important. For example, Lynchat and Insh were founded solely as estate improvements while Kingussie was founded around an existing very much earlier monastic settlement and resulted in the abandonment

of the original settlement closer to Ruthven Barracks. Skye of Curr was planned as an agricultural settlement while Carrbridge was planned around a very small nucleus at the bridge which had been built in 1717 on a diversion from the original Wade road which led through Sluggan to the west. The location of the coaching inn also appears to have been an important locational factor. This may have played a part in the location of Dalwhinnie, Kingussie, Aviemore and Carrbridge although in the case of Aviemore, significant growth did not take place in the late 18th century period.

The second phase of growth started with the opening of the railway (from Aviemore to Forres via Grantown) in 1863. This phase resulted in the erection of large villas such as those in West Terrace, Kingussie, as holiday cottages for the ever increasing number of people visiting the Highlands from the south. Often these larger villas were built for letting, with the owner living in a small summer house in the back garden while his principal house was let. Also in this general period Aviemore appeared as a small village, following the opening of the present main line in 1898 and the development of the resulting railway junction as an important point for railway operational purposes. To this phase can be attributed the construction of the majority of the shooting lodges in the valley but the arrival of the railway does not appear to have had a great effect on the location of dwellings in the area as far as the local people were concerned.

The third, and so far, last phase of urban growth started with the Aviemore Centre. Aviemore itself grew explosively over a small number of years in a very rapid adjustment toward the new source of income. The first phase of this growth, that springing directly from the Centre itself appears now to have passed but is to a large extent being replaced by organic growth stemming from the increased population of Aviemore village and its concurrent greater servicing needs. Growth in other villages in the valley as a spin off from the commercial success of Aviemore has been more restricted and has

tended to result in the consolidation of the economic structure (and hence the physical structure) of the area. The population of the area has, in recent years, been approximately static; hiding an emigration of younger people seeking work elsewhere and an immigration of older people. There has also been an increase in the popularity of the area for retirement and second homes and the expansion of some villages - particularly Boat of Garten and Nethybridge (both perhaps originally river crossing settlements) can be attributed mainly or solely to these grounds. The strains which are now being felt in the valley, in both social and economic terms and hence in the physical structure of the urban settlements, stem to some considerable degree from the need for readjustment to the new economic circumstances brought about by the growth of the Centre. An example is the sub-division of existing feus in the villages; this has resulted from a shortage of serviced building land and from a modest increase in prosperity in the area, whereby increasing numbers of local people are able to build their own houses. Some of the valley settlements would benefit in social terms from a further increase in population in order that they may be capable not only of some form of self sustaining growth but also in more basic terms, such as the retention of primary schools and bus services.

The fourth phase of growth in the valley may now have started. In the past, the effects of each broad phase have to a large degree worked out before the next phase has started. The effect of the founding of the Aviemore Centre as an impetus to further growth, may now be declining but it is being replaced not only by a very slight increase in the resident population of the valley but also by an increase in self catering accommodation. It appears likely that there will be a significant growth in the provision of self-catering accommodation in the valley over the next few years. It is also likely that the sites of such developments will tend to be away from but fairly close, to existing main settlements. This trend will probably be reinforced firstly by the changing economic circumstances in Britain whereby self-catering accommodation becomes increasingly more attractive

and secondly by the new A9 which is now in course of construction. The rapidly increasing costs of personal motoring could make the area more attractive to holiday makers from the central belt of Scotland. In addition, the experience of the effect of the construction of by-passes to existing settlements suggested that after a few years of re-adjustment, and as visitors realise that such by-passed villages are by their very quietness more pleasant, then trade tends to increase.

HOUSES ON TAYSIDE 1660-1770

Geoffry Stell and Bruce Walker

This booklet, which is to be published jointly by the Abertay Historical Society and the Scottish Vernacular Buildings Working Group, examines trends in house design, building construction and building patronage in the important east coast province of Tayside and North Fife in the century after the Restoration in 1660. One of its principal aims is to chart the emergence of the storeyed, symmetrically planned house, and the study concludes with a discussion of its establishment as a standard farmhouse type on the Glamis estate in the 1770s. By way of background, some detailed attention is also given to the regional style and pattern of tower and hall building practices in the preceding late medieval and early modern eras.

Book Review

Alexander Fenton and Bruce Walker
THE RURAL ARCHITECTURE OF SCOTLAND

John Donald Publishers, Edinburgh, 1981. 248pp. illustrated
hard cover.

ISBN 0 85976 020 0

Price £15.00

With the publication of Sandy Fenton and Bruce Walker's lavishly illustrated The Rural Architecture of Scotland a major gap in the knowledge and awareness of Scottish buildings has now been filled.

The large format book (22 x 28 cms) copes well with the vast and variable range of sketched and drawn material which is used where, in terms of the drawings alone, nearly two centuries of different techniques and styles have been adequately handled. Inevitably some loss of detail has occurred in places, particularly where the drawings have been reduced to a degree beyond that which was originally intended. What more than compensates however are the superb individualistic style of Bruce Walker's own sketches which proliferate throughout the book. With almost 500 references, the text is closely documented, clear, concise and informative. Of particular note is the dating evidence which pulls together the sociological and architectural descriptions in such a contextualised manner as to render the interpretation of our rural heritage all the more meaningful.

The general background to the subject is well covered by a discussion of the appropriate legislation and an exploration into the various survey bodies and archival sources available for consultation. Printed sources are dealt with at length and here, the visual comparison between Slezer's 1694 view of a Dunfermline farmyard building and Westown, Errol makes for the interesting speculation that there are considerably more buildings still extant which have an earlier link with the past than is first apparent.

The background explanation of surveys and survey methods gives the non professional guidance as to where to begin such an exercise. Much can be gained from rapid sorties into the field and, if they are planned in a systematic manner, following the guidelines given, any individual can soon produce worthwhile results. However, little has been said about estate muniments generally where, many useful source plans, specifications and building account records can give an additional insight and understanding to what is still on the ground.

The authors cover the two principal visual aspects of any building, the roofing and walling materials, and by establishing base dating information in each of these areas, much has been done to relate the surveyor's field findings to a national framework. Here, the range is immense and the scope for study of individual elements is amply shown, for example, in a diversification of rubble stonework depicted by photographs.

In covering the century from circa 1750, the various described layouts of farm buildings give a clearer understanding of the functionalism that was understood, and sometimes misunderstood, in the buildings design and construction. Such an understanding is fundamental to successful fieldwork as it is important to recognise ancient as well as modern features. However, confusion can, and does, exist where old buildings have been continuously in use and to this end, the authors date related descriptions of used materials can aid further interpretation.

A similarly extensive range of evidence unfolds when looking at the farm workers accommodation. General plans, elevations and sketches are used in graphic support to photographic and survey details of furniture and fitments. Presented with a sequence of development, the reader is taken, with the worker, across the centuries from a rude single ended shelter to a modern, improved and amalgamated structure with all mod cons.

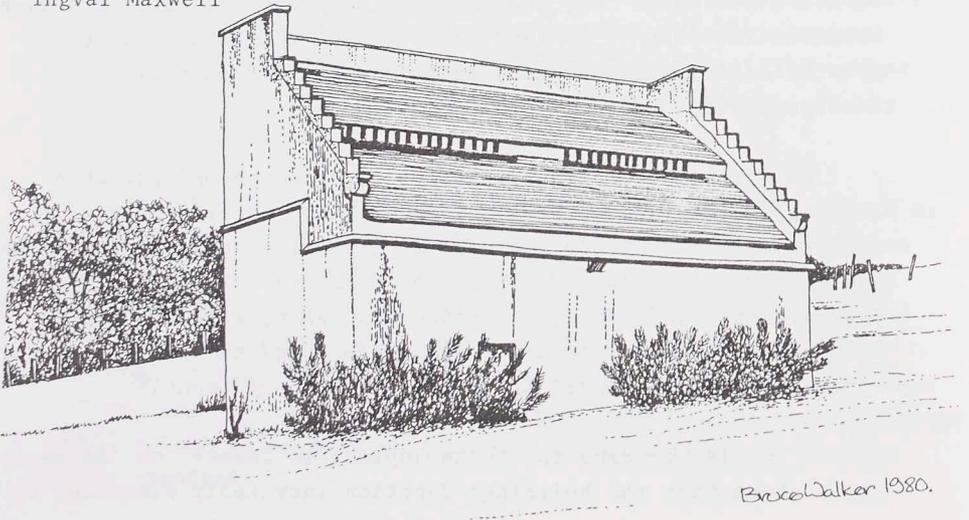
Whilst tracing the technological influences on the farm, it is shown that the buildings function inevitably dictated, or

at least influenced, its original form and whilst the authors rightly claim that time is running short for an adequate study to be made of what remains nationally, it is the fact that a relationship exists between shape and use which makes even the most superficial sortie all the more rewarding.

Whilst much remains to be done, the presented findings of the Grampian Region sample survey shows what is possible if the opportunities, which are available, are fully grasped. Such an approach does, of course, require a degree of personal commitment and financial involvement but with a rich heritage which is fast disappearing, we will soon have no second chance.

The Rural Architecture of Scotland although perhaps inevitably biased towards examples and illustrations from the east and north east of the country, amply shows, by the areas less well explored and recorded where significant work remains to be carried out. Notwithstanding this point, which is well accepted by the authors, it indicates direction towards solving the difficulty and will, no doubt, be regarded in the future with the same esteem as is given to MacGibbon and Ross today.

Ingval Maxwell



Book Review

G.A.G. Peterkin

SCOTTISH DOVECOTES

William Culross and Son, Coupar Angus, 1980.

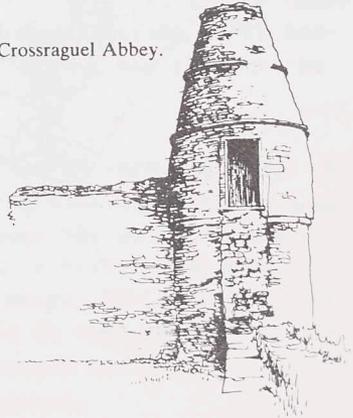
ISBN 0 900323 42 6

Price £2.75

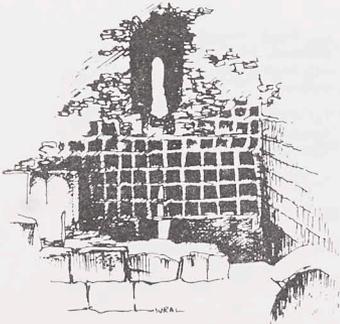
This book contains much welcome and varied information about Scottish dovecotes, based largely on the researches of the late Dr. C. Niven Robertson and the observations of the author himself. The wide range of building styles, types and age are discussed, together with various features such as revolving ladders, flight holes and materials, and literary and historical references. The buildings are well supported visually by photographs, and pleasant line drawings by W.R.A. Logie. It is, however, disappointing that the county by county list of existing dovecotes, the first to be generally available on the subject in Scotland, should not be presented in county alphabetical order and should contain so many inaccuracies.

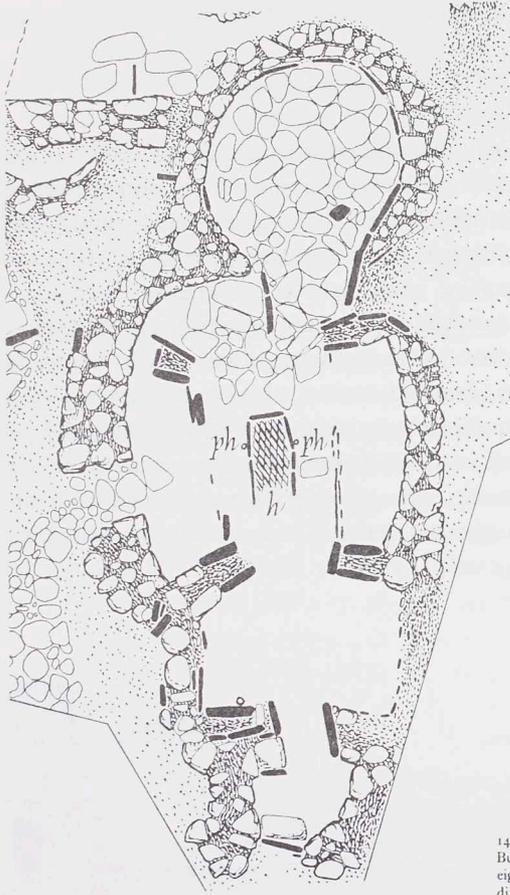
Elizabeth Beaton

5. Crossraguel Abbey.



7. Hailes Castle.





144 Pictish farmstead,
Buckquoy, Orkney; figure-of-
eight house (scale in 50 cm
divisions)

145 Pictish farmstead,
Buckquoy, Orkney; plan of
figure-of-eight house

Book Review

Graham and Anna Ritchie

SCOTLAND : ARCHAEOLOGY AND EARLY HISTORY.

Thames and Hudson, London, 1981.

ISBN 0 500 02100 7 U.K. price £10.50.

Scotland is a country with a long and interesting past. It is unusually rich in archaeological sites, field monuments, objects, and artifacts, many of which have been studied and reported on in detail but many more remain untouched. Until now there has been no fully comprehensive archaeological survey of Scotland in the Prehistoric period. Despite the great variety in Scotland's landscape, recent archaeological excavations have made it possible to construct a coherent picture of the various civilizations occupying the country or parts of the country from approximately 6,000 BC to the union of the Picts and the Scots in 843 AD. This is no easy task as the monuments range from the very simple to the highly complex, from the crude to the highly sophisticated and are further complicated by the fact that the civilizations producing the monuments were part of an ever changing social and political structure ignoring the boundaries of present day Scotland and taking their inspiration from other groups from both within and outwith the British Isles.

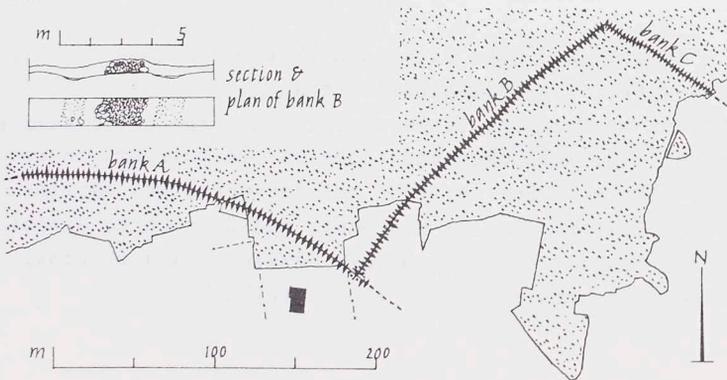
Graham and Anna Ritchie have tackled these problems with both expertise and imagination tracing a development from the earliest hunters and fishermen, through the early farming communities, the henge and stone circle builders to the first metalworkers. They describe the invaders, the warrior Celts, Romans, Britons, Angles and Scots and do much to explain the Pictish kingdom with its highly developed and original art forms produced in both stone and fine metalwork.

At each stage an attempt has been made to describe the dwellings occupied by each civilisation, illustrating variations in the excavated dwellings by means of a series of well drawn plans. These form an excellent base for the study of later forms of vernacular building, answering many questions but in the process posing many more. The book highlights the need for a similar archaeological survey of the mediaeval period to augment the written history and to form a link, especially at the lower end of the social scale, between prehistory and the buildings of the eighteenth century.

The book is beautifully illustrated with both drawings and photographs and the authors and publishers are to be congratulated both on the selection of illustration and on the quality of the printing. The photography is superb as are the line drawings of artifacts and symbols. Aerial photography is also used to a considerable extent and highlights new aspects of many otherwise well-known sites. The text is clear and lucid and the authors must be congratulated on their explanation of the complex without resorting to archaeological jargon. This is one of the most telling features of the book as to do this requires true understanding of the subject.

Bruce Walker

THE FIRST METALWORKERS



SCOTTISH VERNACULAR BUILDINGS WORKING GROUP PUBLICATIONS.
1975-1983.

1975 : Vernacular Building 1. (O/P)

1976 : Vernacular Building 2. (O/P)

: Building Construction in Scotland : some Historical and Regional Aspects.

1977 : Vernacular Building 3. (O/P)

: Clay Buildings in North East Scotland. (O/P)

: Orkney Threshing Mills. (O/P)

1978 : Vernacular Building 4.

1979 : Vernacular Building 5.

1980 : Vernacular Building 6.

Doocots of Caithness

1981 : Vernacular Building 1-3 (reprint)

: The Hearth in Scotland

1983 : Vernacular Building 7.

Forthcoming:

: Working Paper No.1 - Scottish Commercial Ice House Survey.

: Working Paper No.2 - Scottish Cruck Survey.

: Architecture and Society on Tayside.

: The Ice Houses of the Salmon Fishing Industry in Caithness.

: Toll Roads in Angus.

: Two Independent Scottish Farms.

Articles and reports on work in progress should be submitted to the Editor not later than the beginning of August for inclusion in the following issue of VERNACULAR BUILDING.

