CROSS-SECTION

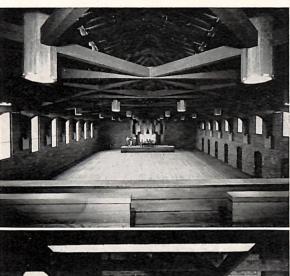
Issue No. 166.





Photo: Max Dupain

This is the 1965 Sulman prize winner, the C. B. Alexander Presbyterian Agricultural College, Patterson, N.S.W., known as Tocal, after the original house on the property. Set in a wide valley of almost dream-like beauty. (Nearly every knoll is crowned with a fine well kept house). One of the best groups of buildings in Australia, containing some extremely sensitive architecture. One of Tocal's major contributions is the integration of the buildings into the landscape, and the sensitive relation of a number of functions (chapel, assembly hall, dining room, classrooms, bedrooms and machinery sheds) into a totality. Each has its own character yet obeys an inner grammar that allows the divergent shapes for the various functions to relate by means of a similar expression of materials and construction. Salmon pink bricks, dark brown stained sawn trusses and plank ceilings, brick paved floors. Yet these forms transcend the mere simple formula of similar materials. The trusses are of bewildering complexity but do not have the slightly bogus quality that the original drawings (C-S No. 143, Sept. '64) would indicate (except for the tube lights at the junctions of the trusses in the Assembly Hall which look contrived and negate the strong "constructed" theme — see photo). The ends of the rafters are painted white and the tree trunk columns to the covered ways have a curious Japanese feel (of the dignity of the Heian period, not the American interior Dec. Mag. shoji screen triviality) which adds rather than detracts from the whole. The massive brickwork is of a 16th century Dutch virtuosity. Unlike the artless informality of Leppington, with its almost ad hoc solution of the structural problems; Tocal has a more complex and sophisticated, albeit a clearer statement of aims, but its relevance to the mid-twentieth century is in doubt. It would have delighted William Morris and the Arts and Crafts movement in the 19th century — even the lettering and the carved door numbers have this quality. The question arises, is it Australian? Like, ethnic? Is it eclectic? Perhaps these are unnecessary questions, for the rural environment may affirm that this is the correct solution. Is it to be absorbed into the vernacular of rural building?
Nearer the mark? Whatever, Tocal is a group that will influence Australian architecture for many years to come.
The alien quality could be compared to F.L.W's. Taliesen West which made a new use of the traditional U.S. South-West architecture and for a time affected nearly every building of any pretensions in the South-West. In many ways they are similar: both have a wide variety of building types grouped together with a coherent structural logic running throughout. Both have a monumental scale from a distance and one expects to be disappointed by fine but overscaled buildings, but on arrival, by some magic, all is reduced to a pleasant domestic scale. Again both have a marking point, Tocal the spire and Taliesen West the tower arising out of the mesa. Unlike Tocal, Taliesen West has a casual "do-ityourself' quality. The scale is one of the most deeply satis-fying aspects at Tocal. From a distance of a couple of miles the entrance is compelling with its enormous pillars, yet





Photos: Max Dupain

examined at close quarters it is only seven feet high and almost sub-domestic. On entering this portal the porch soars up the full height of the Assembly Hall and the top is lost in darkness after the bright sun outside and through the mysterious web of trusses. At the other end of this porch the spiky form of the chapel is revealed. The placing of the chapel is masterly, as it forms on the east a group of humanscale courts linking the functioning part of the school. On the West it forms a huge court filtering off into the paddocks no longer domestic but of their scale. The walk around the group starting on the entrance (South) side is bland, but gives hints of what lies beyond, dominated by the entrance and the assembly Hall. On the East service rooms and machinery sheds, unpretentious with a dazzling array of roofs. On the North moving West the spreading roof of the dining room slides into view, then the battered walls of the chapel under the spire. Next the flank wall of the Assembly Hall unrolls to its full length. The students' common room at the North end of the bedroom block forms a stop to the rigidly organised facade of the repeated bedrooms, relieved only by the battered brick walls between the windows. Some dramatic views down the corridors and enclosed courts of this block. Further on the West the long line of the bedrooms forms a wall over which the spire and roofs float. This may not sound dramatic but each step is well controlled, and the scale of the openings has no hint of hesitancy. They are bold, reading well at a distance yet the textures of timber and brick hold the interest at close range. Above all the play of the spire and the roofs are seen in new relationships. Ian McKay & Philip Cox, archts; F. S. Shaw, str. engr; Thomson Whitting, sewerage and drainage; Norman Addicoat, mech. engrs; Gardiner Constructions Pty Ltd, bldrs.

The Award of Merit of the R.A.I.A. (S.A. Chapter) has been made to Dickson and Platten for their design of the

Arkaba Restaurant, Fullarton, S.A. (C-S. 147, January '65).





Merchant Builders: Architect Graeme Gunn

Photos: Kurt Veld



Leighton Lowline: Architect Peter Hooks



C.H.I. Modular: Architect Geoffrey Woodfall

Following the rewarding public acceptance and tremendous sales of the Woolley-designed Pettit & Sevitt merchant-built houses in Sydney (C-S No. 141, July '64 and No. 154 Aug. '65) several project house builders in Melbourne finally got the message that architects had been trying to put across for years. Independent architects were commissioned to design housing types for sale to the increasing number of discriminating home-buyers who are looking for an alternative to the hackneyed triple-fronted b.v. villa, who find the small homes of the Institute's Small Homes Service too small, and who like to see a sample of what they are buying built before they buy it. They want some pretence at least, of individuality, but without the expensiveness that an architect's custom designed one-off house usually entails if uniqueness is sought. However, they recognise the architect's design capabilities, and like to be able to consult him for advice on siting, orientation and minor plan revisions. For the architect commissioned by a building company to design a range of houses, and retained as a customer-consultant, there is a feeling of involvement in community service that cannot be sustained through designing single houses for separate clients. There is a pleasurable continuity of work and there is the shock of finding just how cheaply a welldesigned house can be built when collaboration occurs between builder and architect in all stages, compared with the competitive tender system. House design, long regarded as a losing proposition by architects' offices, becomes under these circumstances a better procedure economically for builders, buyers, and architects alike, and a more efficient deployment of resources of talent, materials and money. First in Melbourne to enter this category was the company known as "Merchant Builders" which under the enlightened directorship of David Yencken, with Graeme Gunn as archi-tect (see C-S No. 161, March 66 for his 1965 Victoria Architecture Medal house), could hardly have failed to succeed. Succeed it has. Gunn's three prototype houses, the Terrace House, the Studio House and the Courtyard House have an atmosphere of architectural quality that so far none of the other commercial developments have quite been able to match, even if in regard to detailed planning and finishes improvements could be found. Construction generally is brick veneer, sawn oregon fascias and beams, plaster board internal lining, and either plaster ceilings or exposed boarding with sawn rafters, with steel roof deck. The timber is, naturally, naturally stained. The Studio House, split level, is most interesting internally, with some fine views from the entrance level looking over the living room, including an unusual vista in the display model, if the right doors are left open, to the W.C. pan (This has been corrected in a revised plan but the bathroom door is still directly opposite the entrance door). There are several variations to this plan, including an attic variation, a two-storey variation, and a three-bedroom variation so that minor complaints with one can be overcome in another. Access to bedrooms from the entrance is generally along a corridor which runs beside the living room, but at a higher level. In the Courtyard and Terrace houses, the parents' bedroom is normally on the opposite side of the living room and dining room to the children's bedrooms. This separation could bring irritating cross traffic through the living room and would not be suitable for nervous parents who "like to be able to hear the kids". Contrariwise it is fine for those who like their adult privacy. Front entrances are either directly into the living room or via an off-shoot entry, but there is in no sense a traditional hall and passageway from which any other room can be reached without crossing through a third. This perhaps trivial circulation disadvantage is compensated by increased spaciousness in the living areas. Lighting is so well-integrated into the designs that sometimes it's difficult to see it, even when it's switched on. Located with their long axis parallel to the length of blocks of small frontage (50' 0" or less), in the Studio House either the living room or the family room, which are on opposite sides, would get a close view of the side fence, and if one is oriented northwards the other could be unfortunately facing south. The Terrace House (so-called because of its terrace, not because it's a trad row-type house) overcomes this difficulty partly by facing living room and family room in the same direction, but the living room does not face directly onto the terrace except in the larger versions, so that its advantages are not fully realised. The Courtyard House on restricted width blocks would either require front entry to be through the courtyard, which destroys its privacy, or along the narrow strip between house and side fence, which would look mean and constricted. On sites upward

of 60 ft. frontage most of the orientation and aspect problems could be countered and if there are any trees left after the subdivision has been put through, any of the houses

Architect Peter Hooks designed a single house, the Lowline, for Leighton Constructions and to their amazement, its sales outstripped their previously standard range. The Lowline is white painted brick, stained timber, tile roof, "cathedral" ceiling (the inflated sales-trade jargon used for a ceiling following the pitch of the roof) on a basically rectangular plan, with offsets at either end to cope with a family room and a bedroom projection. The plan is fairly standard, entry on the long side, left to living room, ahead through a door to the kitchen or to the right to bedrooms and bathroom grouped around a passage. Again there are many variations (Hooks claims 75 varieties) that adapt the plan to differing requirements of site or accommodation. In the display house the family room-living room is turned towards the "backyard", with bedrooms "up front". Amongst agents, this was believed to be anathema to Melbourne buyers, but the obviously sensible arrangement has been one of its most popularly received aspects. It is also an arrangement which makes it possible to score north orientation for both living and family rooms, or at worst north to one and either east or west to the other — the only really awkward site would be one with a frontage on the north. Attractive, but not as fascinating as Gunn's houses, Peter Hooks' design has advantages in the clear workability of its plan and the generally direct quality in its elevations.

C.H.I. have joined the bandwagon with a series called the 'Modular' designed by architect Geoffrey Woodfall. At the time of writing one has been completed and two are under construction. The plan is basically rectangular and in principle similar to the Lowline layout but with a family room on the opposite side of the kitchen. However, the feeling of the houses is quite different. Woodfall's approach is more romantic and on the completed model at least, more lavish with finishes, e.g. black bean veneer doors. The materials are tile roof, brick veneer, sawn oregon fascias, roof-line ceilings in either plaster or pine boarding, and one model has a gambrel roof. Each house plan type is extendable in 3 ft. modules. The high ceiling space under the central ridge is converted into attic storage space by a lowered horizontal ceiling over the central passage — this horizontal plane also projects into the kitchen and family room and although it provides for concealed lighting, indoor plants, etc., it could also be an annoying dust catcher. The first display house has a corner window which leaves the dining section of the L-shaped living room rather dim, and the floor to ceiling glazed walls in the two variations under construction make for much better rooms. Windows are sashless vertically sliding glass. The display models are built on sites with conventional side fences, and adjust very well to this inhibition. Of the basic models in all the available ranges, the "Modular" seems to make the most out of the typical suburban site confines, with the car port as an integral part of the design instead of an appendage.

Beyond Burwood, a Melbourne suburb where the orchards used to be, Lend Lease Homes Pty. Ltd. have built a plum development of six houses designed by Robin Boyd of Romberg & Boyd and called it Appletree Hill. The objective is, to quote the brochure, "the creation of a sizeable community wherein individual houses and landscaping and street design blend harmoniously to make an environment of dignity and beauty and of a homogeneous character which will set it apart from ordinary suburbs". Inspection is by invitation only (the development is fenced off) but any literate suburbanite may fill in an application form. Each house is fully furnished, carpets, blinds, curtains, etc., all well worth plucking, so the control over visitors, seemingly a status gimmick, is only reasonable. The layout is suburbia transmuted almost to arcadia — the houses are generously sited about a street loop which contains a modest high-class "common". The essential best of suburbia, separate houses graciously set in a park-like landscape is here, but so also is its bane — the separateness of the houses, emphasised by the lack of front fences and their dispersion creates no positive "space between buildings". Perhaps suburbia by definition can never achieve more than this. One suspects too, that on the display estate the houses are set unusually far back from the street only in order to give the look of ample land. The backyards, the only place for outdoor privacy, are mini-suburban. The double car ports to each house are prominent and when fully stocked would incline

one to the view that this is not so much a way of living as a way of parking. Individually the houses are in either redblue brick or white painted brick, flat steel roof deck or charcoal cement tiles, with deep reddish-brown stained window joinery. Internally the colours are good and strong, much more colour-full than any of the other project houses mentioned in this issue. One enjoys the bravado of red or black plastic laminate bench tops in a project house kitchen. The two single bathroom house types (RB001 and RB010) have been criticised for having access to the W.C. through the bathroom, and RB002 has an uneasy proximity of a W.C. door to the entrance and to a gaze from the living room. In RB002 also, the fireplace wall has a central brick panel with a stainless steel hood, flanked by side panels of vertical boarding. In other models this feature is more self-effacing, for the boarding is omitted. The inclusion of laundry equipment in the family rooms of RB010 and RB004, behind accordian doors, has not come off too well, but the general separation of living rooms from family rooms or dining-roomkitchen spaces has its obvious and welcome advantages. Diverse outlooks from various rooms keep the interior spaces lively and interesting, especially on this well-prepared site. Unlined eaves on the tiled roof houses are incongruous, however, when seen from a sophisticated interior — it seems to be too penny-pinching in a development which otherwise makes no overt displays of economy. Overall, to the average visitor, Appletree Hill must come as an astonishing revelation of how good a suburb can be when it is designed as an entity. To the architect who comes with a hypercritical eye, the full impact of the place is not realised until driving out back to Springvale Road past the uncoordinated mediocrity that is the suburban norm and which in contrast now seems so much worse.

If we must have sprawl, better a Boyd in the bush than a b-v in Bulleen.

In fairness to the builders and architects whose houses have come under inspection in this issue of C-S, it should be pointed out that a single house cannot be designed for virtually an unknown client and site in which all conceivable priorities of planning, circulation and orientation can be solved simultaneously, particularly when a market price must also be met. What is most significant is that now in Melbourne a prospective home buyer can do what was impossible as short a time as twelve months ago i.e. shop amongst architect designed houses of good quality for the plan and feeling that satisfies a personality, suits a site and states its own value. Anybody who can't find what he wants amongst this selection (and amongst further types now coming off the drawing boards) really **does** need an architect, personally.



Appletree Hill: Architects Romberg & Boyd

This account of the Process of the Pro This assessment of Appletree Hill was written just prior to the stunning announcement from Lend Lease and Robin Boyd that the project as a whole had failed. Of the 10,000 people who had visited the site many seemed to be interested but few actually bought. The built houses will now be sold privately and the remainder of this promising estate will merely be sub-divided and built upon in the usual ad hoc manner. A few years ago another attempt by Lend Lease to introduce new designs in an estate at Doncaster is believed to have been a financial flop. This time a press release admitting failure, a rare public relations move, looked like a hasty retreat by fingers previously burnt.



At Beaconsfield (Vic.) archt. Charles Duncan has designed another house of beautiful spaces (recall his Vic. Arch. Medal house in Ivanhoe, C-S No. 142, 1964), using handmade bricks and reconditioned slates from the previous house, on the same site, of the present owners. Essentially three hipped roofed rectangles; one containing carport and guest rooms; a second the living areas and kitchen and the third, bedrooms; in a low site-ingratiating disposition settling easily amongst broad rolling lawns. Very Wrightian and romantic of course, but quite captivating with its use of beautiful bricks exposed inside, smooth plaster ceilings following the line of the roof, a slate floor in the kitchen, and eaves soffits which project into the major rooms, contain concealed lighting and keep the scale domestic. A minor quibble is with the brick piers supporting the carport roof, which march along towards the entrance and maintaining their carport elevation, protrude resolutely through the roof of the living block, the floor of which is at a lower level. This is an awkward junction and seems nervous compared with the assured and consistent detailing of the building as a whole. E. Drossaert, bldr. Approx. 30 squares.



Photo: David Moore

The Engineering Design building at the Australian Atomic Energy Commission's research establishment, Lucas Heights, N.S.W., consists of offices, drafting offices and associated ancillaries grouped about a central courtyard. Two stage construction: ground floor completed 1963, upper floor approx. 12 months later. Structure conc. flat plate, six ft. projections all round for eaves and balconies. Fascias: unpainted precast conc. Handrails and window transoms oiled redwood. Non-actinic glazing in alum. frames. Grey brick infill panels. Collard Clarke & Jackson, archts. Consultants: Rankine & Hill (str.), W. E. Bassett & Partners (elec.), Rider Hunt & Partners (q.s.). Bldrs. K. B. Hutcherson & Hogg Pty. Ltd. (Stage 1) and Freedman Construction Pty. Ltd. (Stage 2).



This High School by Tony Brand of Forbes and Fitzhardinge archts, at Kewdale, W.A., houses 600 students with central facilities for 1,200, cost \$662,000, a rate of \$1,148 a square. Extensions planned to start soon will raise the number of students to approximately 1,200 for an additional \$300,000. Elimination of finishes and painted surfaces whenever possible enabled construction to be completed in six months, and should reduce maintenance to a minimum. Watson Construction, bldrs. A cross fall to the site enables links at the primary circulation level to give access to the middle of the 3-storey lab. block. The resultant compact plan keeps the buildings clear of low-lying waterlogged land without the usual disadvantages of stairs in 3-storey construction. This is for a number of reasons the outstanding building constructed in this State for some years. It is the first school which has not been planned merely as so many classrooms lined up in a row. Interesting views through buildings, over roofs and under arches, odd little spaces which have not been "tidied up" and a swathe of (future) grass sloping up into the heart of the complex, all form part of a conscious effort to create a suitable environment for children. Secondly in a town where the use of brick and tile is usually in direct proportion to the naivete of the architect, this school shows that the "trad" medium properly used may be as sophisticated as any combination of "modern" materials. Great slabs of red brickwork rise out of the ground to support directly applied roof silhouettes. Top storeys are treated as penthouses and elsewhere tiled roofs are carefully articulated between concrete areas. Thirdly the school has demonstrated the community value of a really dramatic building. Rising up out of the backyards of asbestos bungalows, it imparts a focus and a form to an otherwise featureless suburb, transforming it from a modern slum to a negative backcloth. This effect could not have been achieved without a superabundance of forms and details (many of

Architecture students at the University of Melbourne have launched an appeal for \$230,000 to complete the new school building.

MI Ove Arup, consulting engineer to the Sydney Opera House, received the R.I.B.A. Royal Gold Medal for Architecture in June.

Sir Osborn McCutcheon of Bates, Smart and McCutcheon received his knighthood in June for his services to architecture.

Mr. Jorn Utzon was awarded the William and Hugo Evers Foundation \$6,250 honor prize in Copenhagen in time for his "contribution to building and construction".

his "contribution to building and construction".

The several private architects who, under the N.S.W. Govt. Archt, have taken over the Sydney Opera House, formed a firm for the occasion: Hall, Todd & Littlemore, Architects. Peter Hall left for a twelve-week tour overeas to learn about opera houses. It is not known if he will visit Denmark.

Mr. Davis Hughes declared that Utzon's seating plan for the Opera House would fit 2,800 people only if the rows were a mere 2' 5" apart back to back, as shown on Utzon's drawings, and that 2' 5" is too close for comfort. This sudden discovery seemed to bear out Utzon's contention that

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