

EXTENDING ARCHITECTURAL REGIONALISM

HOUSE ROOKE, MONAGHAN FARM, LANSERIA, 2010–2011

ARCHITECT: THOMASHOFF + PARTNER ARCHITECTS

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HOUSE ROOKE at Monaghan Farm, located near Lanseria in Gauteng, is an architectural endeavour by client and architect that extends regional architectural traditions. In a time of architectural blight, aesthetic confusion and a plethora of ill-conceived estate environments, both parties have succeeded in designing a refreshingly contextual dwelling that extends functional and technological traditions and grounds the architecture in place and in history. This article will define regionalism and then briefly contextualise its effect locally. It will explain how the architecture of House Rooke is an extension of regional traditions and how an imitative and inventive regionally architectural solution, that can act as a possible model for others to follow, has been created.

REGIONALISM: CONSERVATIVE, MEDIATIVE AND RADICAL RESPONSES¹

It can be argued that to respond regionally in architecture, an intimate understanding and appreciation of the qualities of place and its relationship to socio-cultural practices is necessary. At a more pragmatic level, sound knowledge is required of the geographical characteristics of a region, such as their climate, topography and building traditions, which include available materials and technologies (Barker, 2012: 124). Regional architecture responds to culture through a reinterpretation of

traditional built form, but also to social concerns through a reinterpretation of varying ways of living. Regionalism is a self-conscious response to regional conditions. Architects will choose what to respond to, not out of necessity, but because of the options available and, to put it simply, because they *can* (Barker, 2012:125).

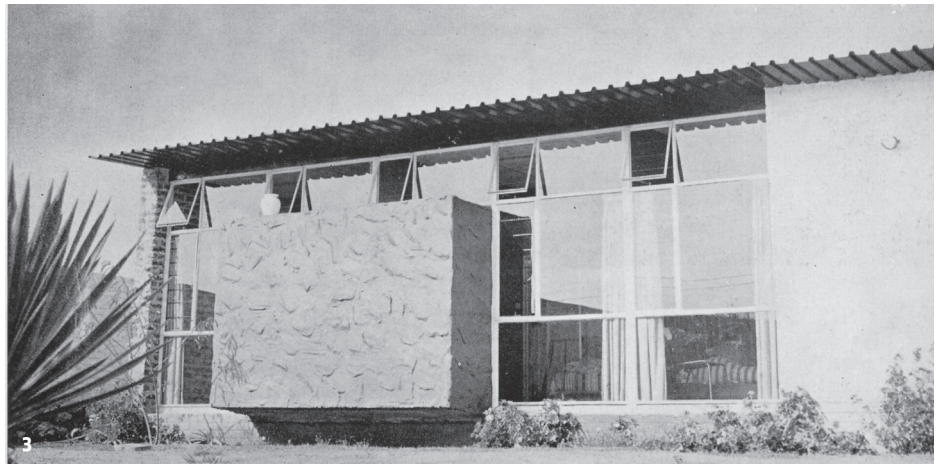
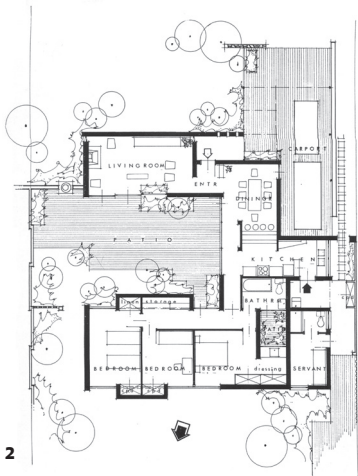
Canizaro (2007:18) argues that at the heart of any regional response is a resistance to standard forms, a concern for authenticity, and a fostering of connectedness between people of a specific culture, through common associations such as history and ecology. Canizaro's supposition that regionalist architectures are inherently resistive is, however, contestable. Regionalist responses will, by the very nature of the difference in regions, be heterogeneous. Some regions will be more susceptible to outside influence than others, due to their location (closer to or further from universalising tendencies) or, perhaps, the lack of an entrenched tradition. It can be argued that regionalist architectures resist *and* accept both standardising tendencies (that reduce local differentiation) and revivalist tendencies. The resultant mediation then shifts on a scale from acceptance to resistance. The approach would depend on the value that the designer ascribes to the varying influences. Regionalist responses can therefore be more accurately described as

reactionary in nature, as they respond to the polarities of universalisation and revivalism (Barker, 2012: 125).

The search, in South Africa, for contextually relevant and regionally appropriate architecture has been ongoing since the sublimation of indigenous cultural expression during and after colonisation. Some approaches that come to mind are the four traditions of the Cape vernacular (Greig, 1971:17; Barker, 2012b:36-44). Although Herbert Baker's Arts and Crafts-conservative manipulations of the Cape Dutch tradition are regional – through a conscious response to the making of place by responding to climatic conditions through 'cool loggias and open courts' (Pearse, 1960:18) – they are also a reaction to the 'eclectic, often vulgar, but always vigorous architecture of High Victorianism' (Herbert, 1975:1). So the response was, in the main, the product of a European tradition. Similarly, the architecture of the Dutch immigrant De Zwaan (1867–1948), who modified existing pyramid-type forms to suit local circumstances in the, then, Transvaal, could be seen as a limited and conservative attempt to manipulate inherited and standardised Victorian forms.

One of the first radical regionalist reactions in South African architecture was that of the architect Moerdijk, who negated Imperialist tendencies by arguing for an 'Afrikaner (African) architecture' (Fisher, 1998:124). Moerdijk was supported by artists such as Pierneef and Van Wouw, and writers such as Preller. The climax of this architectural reaction was the Art Deco-inspired Voortrekker Monument of 1938. Also, the radical regionalism of the Transvaal Group in the 1930s attempted to dispel the 'eclectic, reiterative and tired' (Herbert, 1975:1) 'neo-Renaissance' (Cooke, 1960:21) -inspired architecture of the period, through the importation of a Corbusian and Bauhaus motivated Modern Move-

1. The northern aspect of House Rooke (Rooke, 2012)



ment. Tzonis (2007:216) explains: ‘There are important precedents in the creation of a regionalistic architecture in South Africa. I do not refer to the picturesque “Cape Dutch” houses, intruding African or the whitewashed thatched vernacular that followed them, but rather to the earlier efforts to create a modern architecture that, as much as it was “western internationalist”, also demonstrated serious efforts to design within the framework of the region – as the concept “region” was defined at that moment’. Through Martienssen’s (1905–1942) editorship of the *South African Architectural Record* and the 1933 publication of *zero hour*, modern ways of living and the advantages of new technologies were disseminated. But it was to be a short-lived period, as the emphasis soon shifted from Johannesburg to Pretoria, where a strong mediative regionalism arose.

The development of this architecture was, in large part, a reaction to the ‘coldness’ of the cubist domestic architecture proposed by Martienssen and his followers, but also extended the trend of earlier regional works, such as those by De

Zwaan, that reflected the exigencies of climate and available materials. A true mediation occurred, one which synthesised modern living requirements, flexible planning, modern technologies and economies of space/materials and war shortages, with the need for a truly ‘South African’ architecture that responded to its climate and setting. McTeague suggests (1983:47) that the work of Norman Eaton (1902–1966) is an exemplary example of a South African [mediative] regionalism, through its synthesis of the planar nature of the International Style, the physical influences of site and the ‘heritage of Cape Dutch houses’. So-called Pretoria Regionalists, such as Robert Cole Bowen (1915–1952) and Hellmut Stauch (1910–1970), used design principles such as the efficient use of space and a direct response to local context (through material use and climatic orientation) in both their work and teachings. Stauch’s ‘houses made good economic, functional and climatic sense, to assume in their simple vocabulary a poetry with local materials’ (Peters, 1998:175). Cole Bowen, ‘the constructional rationalist’ (Peters, 1998:

176), was fastidious in his application of the standard steel window grid of 3’4” and anthropometric data for cupboards, drawers and furniture (Fisher, 1998:129). These approaches formed the design ethos of many post-war architects, and the tradition was extended by influences of Brazilian Modern Movement architects like Oscar Niemeyer.

During the 1960s, these principles were further extended by a number of South African architects. As an example, Piet Kruger’s 1960s design for a house in Westonia exhibits all the qualities suggested by Fisher (1999:125) as characterising Pretoria Regionalism: *traditional plan form, rustic brick, either directly or as whitewashed stock, low-pitched iron roofs, deep-shaded eaves and verandahs, sun-shy windows, sensitivity to landscape and land features, and an architecture responsive to climatic constraints*². This mediative regionalism was a conscious architectural choice that reacted to universal and revivalist standardising tendencies and, in a Mumfordian sense, straddled the boundaries of tradition and modernity in imitative and inventive ways.



Similar design approaches were also found 17 000km to the west in the buildings of the Case Study House program, mainly undertaken in Los Angeles, California, between 1945 and 1962³ (McCoy, 1977). It delivered 'low-cost, experimental modern prototypes [that] epitomised the aspirations of a generation of modern architects active during the buoyant years of America's post-World War II building boom' (Smith, 2006: 6). John Entenza's five-year-long *Arts and Architecture* publication became the client for many of the houses and was intended to 'offer the public and the building industry [various] models for low-cost housing in the modern idiom' (Smith, 2006:6). The programme attempted to create modern dwellings suited to the local climate, the economic use of material, available building technologies and efficiently organised internal layouts⁴. Other formal attributes of these houses were south orientation for living spaces, providing year-round internal comfort and a 'pronounced indoor-outdoor emphasis' (Gössel et al, 2009:8). From 1950 to 1960, steel frame technology enhanced the principles of the Case Study House program (McCoy, 1975:69). New and thinner-walled steel profiles with greater strength provided increased spans and functional flexibility, while heightening spatial transparency. The most iconic residence was Case Study House #22, the Stahl house (1960), by Pierre Koenig. Here the architect exploited the possibilities of steel construction on the mountain precipice, providing a 3m cantilevered floor and 2.1m cantilevered roof overhangs.

Craig Ellwood (1922–1992) contributed three of the thirty-six Case Study House projects that were built or proposed, namely numbers 16, 17 and 18. The latter, completed in 1957, was designed on a 2 438mm (eight foot) construction module. The honest expression of the simple steel framed structure followed Ellwood's strong belief that 'architecture was waiting for industry to develop standard parts... so they could proceed with experiments in forms for lightweight materials' (McCoy, 1977:105), in order to achieve constructional efficiency.

Killingsworth, Brady and Smith, in their Triad development at La Jolla (1959-60), extended the architectural traditions set by earlier Ellwood houses by improving the spatial quality of the somewhat stark, monotonous, nature of its antecedents. The more sophisticated detailing of column and beam junctions and the internal cupboard room dividers are similar to South African

examples like Meiring, Naude, Papendorf and Van der Merwe architects' Atrium house in Camps Bay (Wale, 1965:73-8), which was built over the same period.

SYNERGY

The mediative regional architectural approaches developed after the 2nd WW, in Pretoria and Los Angeles, bore many similarities and fostered cross-Atlantic architectural influences. According to Guedes (1998:34), the Case Study House program indirectly influenced the South African architect Revel Fox (1924–2004): 'The last houses done at Worcester, and those he was doing in Cape Town, soon came to be known as "Fox boxes" – they had flat roofs, quite diagrammatic plans and incorporated timber-louvered screens. They had something of those Californian case study houses (which were to culminate in the Eames house at Santa Monica)'.

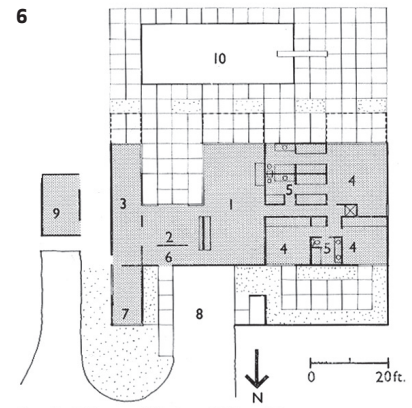
In 1960, Harold Le Roith (1906-), together with the Institute of South African Architects, invited Richard Neutra (1892–1970), one of the most important contributors of the Case Study House program, to visit South Africa⁶ as they both shared a common love of architecture that responded to site and landscape. (<http://www.artefacts.co.za/main/Buildings/archframes.php?archid=4079&countadd=1> [accessed 16 October 2014]).

Another prominent South African architect, Norbert Rozendal (1944–1995), who achieved notoriety with Heinrich Kammeyer (1942-) for his Pietermaritzburg Cathedral and long-term partnership with Roelof Uytenbogaardt (1933-1998), worked for Charles (1907–1978) and Ray (1912–1988) Eames during his practical year in their Los Angeles office.

Closer to home and time, the Pretoria-based architect Karlien Thomashoff of Thomashoff + Partner Architects has created a unique, regional-modern dwelling at Monaghan Farm near Lanseria airport, Gauteng. It is rooted by its local informants but, more importantly, is an extension of deeply entrenched local and international mediative regional architectural traditions fuelled by the tenets of Pretoria Regionalism, the predilections of the architect and her client's appreciation of the Case Study House program.

THE ARCHITECT

Karlien Thomashoff (1968-) graduated with distinction in 1992 from Pretoria University's Department of Architecture and, four years later, was chosen as a finalist for the, then, biannual 'SA Rome Scholarship in Architecture'. She regis-



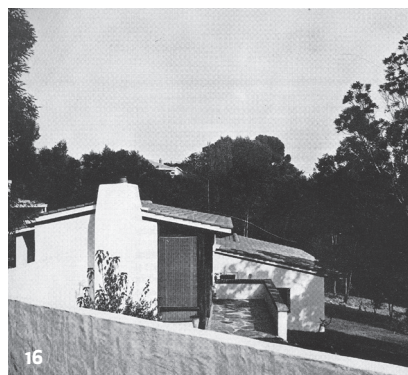
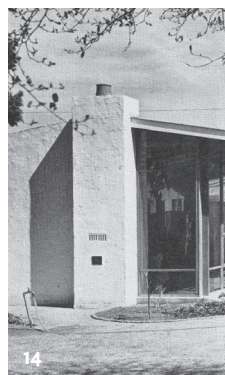
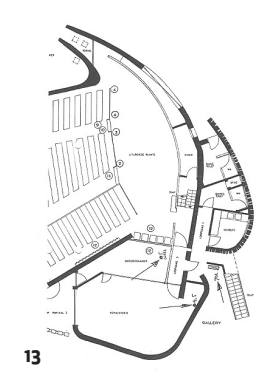
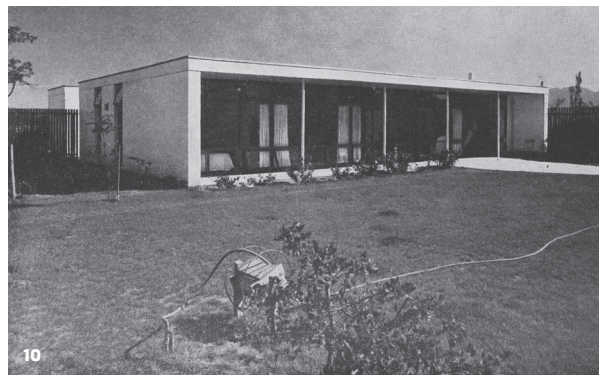
- 2.-3. Plan of house in Westonaria by Piet Kruger and north elevation of bedroom wing (Wale, 1965:99-101)
- 4.-5. Stahl House living room (Gössel et al, 2009:317 and Author, July 2014)
- 6.-7. Craig Ellwood, plan of Case Study House #18, Fields House, Beverley Hills (Pidgeon and Crosby, 1960:140) and entrance view (<http://www.arcspace.com/bookcase/case-study-houses---the-complete-Case-Study-House-program/> [accessed 19 October 2014])
- 8.-9. Killingsworth, Brady and Smith Case Study House #23B, La Jolla (Gössel et al, 2009:334) and courtyard of Atrium house in Camps Bay by Meiring, Naude, Papendorf and van der Merwe architects (Wale, 1965:78)

tered as a professional architect in 1998, after working in Düsseldorf, Germany – a short stint in the public sector and at a large firm specialising in health-care design. Together with MAA architects in 2005, Thomashoff won a ‘South African Institute of Architecture National *Award of Merit*’ for the design of Diamond Hill Toll Plaza. The project was also selected as the 2005 overall winner of the South African Institute of Steel Construction Steel Awards’ (<http://ykarchitects.blogspot.com/2007/08/karlien-thomashoff.html>). In 2013, Thomashoff won a Pretoria Institute of Architects *Award of Excellence* for House Rooke.

Her regionalist leanings are both inherited and learned. Her grandfather, Philip Nel (1909–2002) was responsible for one of the more notable UP campus buildings – the Aula theatre – completed in 1958. He was part of a group of architects that formed a second wave of regional modernism inspired by the Brazilian variant and, as Fisher has suggested (1998:127), exhibits a strong regional architectural lineage through the work of Baker, Leith, Eaton and Jooste. Nel’s NG Kerk in Waterkloof is a case in point. As a local interpretation of Le Corbusier’s Ronchamp cathedral, it extends the Modern Movement’s spatial and formal traditions using rustic materials like facebrick. Detailing, junctions and light quality are aspects that Thomashoff admires. She admits, though, that her grandfather’s work only became influential after she had left the university.

Thomashoff’s final-year project at the University of Pretoria was a fashion design centre situated in the veldt in Midrand, and here the influence of her thesis studio master, Anton Du Toit, loomed large. He introduced her to a proportioning system that had a long history through the influences of Le Corbusier’s Modular of 1951, Karl Jooste’s visits to Le Corbusier, and his, Cor Grobelaar and Fagan’s use of the ‘Dynamic Symmetry’ by Hambidge in their work (Fisher, 1998:128), inculcated during their University of Pretoria education. It was only while doing working drawings for her thesis, when the power of these organisational systems became evident for Thomashoff (2014) – and that way of working has remained with her to this day.

Her appreciation of Pretoria Regionalism grew after she began to work in the office of Samuel Pauw (1936–). During lunchtimes she and a colleague, Jan Booysen, would walk around Lynnwood Glen (near St Alban’s High School) and document the regionally inspired houses. These included George Wilsenach’s⁷ own

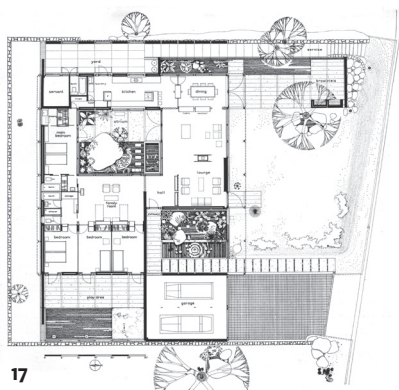


house on Innes Road which was, according to Thomashoff (2014), one of the best on the block. Other inspirations were houses by Jack van Rensburg, Johnny Claassens and Pieter Hattingh (1932–)⁸. Allan Konya’s⁹ St Peter’s seminary in Hammanskraal is a particular inspiration for Thomashoff, through its expression of continuous axes, spatial continuity, innovative local material use and attention to detailing. Many of these regionally biased design principles are evident in House Rooke.

The appreciation of Pretoria Regionalism fostered an ongoing research activity for Thomashoff, that led to the conservation of a number of exemplars in Tshwane. These include recent alterations to the Aula and an Allan Konya residence in Hillcrest. In 1999, she published and exhibited a compilation of local buildings of architectural merit and was one of the first South African members of Docomomo¹⁰ (<http://ykarchitects.blogspot.com/>

[2007/08/karlien-thomashoff.html](http://ykarchitects.blogspot.com/2007/08/karlien-thomashoff.html)).

A particular architectural inspiration for Thomashoff is the book, *New Home Building Ideas – Architects’ Plans for Southern Africa* (Wale, 1965), a compilation of Architect and Builder publications of South African residences built in the 1950s and 1960s. The buildings are, in the main, regionally-modern due to their direct response to place through site location, orientation, material use and expression of new ways of living. The drawings are particularly alluring for Thomashoff, through the expressive and evocative representation techniques used to communicate landscape elements and materials. A particular favourite for her is the Atrium house in Camps Bay (Wale, 1965:75). Here, a tectonic logic is rigorously expressed through a grid layout and finely detailed column and beam connections, recalling those of Killingsworth, Brady and Smith in La Jolla in Los Angeles. Functional efficiency is achieved



really, if you have a “signature” style’. Her architecture is therefore client-specific before being site-specific. Her House Boshoff (2000) in Menlo Park, Pretoria, takes a courtyard form with mono-pitch roofs and an attenuated plan, all organised on a grid system. It sets the pattern for her second dwelling, House Van der Berg (2002), situated in a gated community in Eldoraigine, a suburb south of Pretoria, which recalls Jack van Rensburg’s Spanish Style influences through its textural and sculptural properties – complete with a ‘miershoop’ chimney. Thomashoff describes the house as raw and naïve but it sets the tone for houses to follow, not least House Rooke.

THE CLIENT

The clients, Gavin and Karin Rooke, are a 40-something couple originally from Pretoria. Gavin was previously a gallery owner and advertising executive. He speaks passionately about architecture, and is certainly far more educated about the profession and its precedents than most clients. He explains that ‘Good design is an ethic, not an aesthetic. You need constraints. Operate within them, and you’ll find everything’ (Bornman, 2008:163). Prior to the Monaghan Farm house, he’s designed and built two houses – one in the Cape and one on the Vaal River. They exhibit a sensitive response to place and local architectural traditions, spatial transparency and constructional innovation.

Gavin explains that at Monaghan Farm, ‘Our primary objective was to build a home that leverages the ethics and aesthetics of mid-century South African Modernism, within a contemporary context. Accordingly, our choice of architect¹² was influenced by Thomashoff’s inherent appreciation for Pretoria Regionalism, given her family upbringing, tertiary education and active involvement in the preservation of examples of Pretoria’s mid-century architecture’ (Rooke, 2013).

Gavin’s fervour for the Californian Case Study House program and, particularly, the work of Craig Ellwood, sparked Thomashoff’s interest and has, of late, resulted in a South African version of the program using light frame steel construction and St Gobain products in a house called Stand 47, just below House Rooke¹³. The Rookes are also fans of the 1950s and ‘60s architecture of Pretoria. Visits with Thomashoff to Jooste’s house, now a restaurant in Waterkloof, Pretoria, and to the house of Okert Willem Spruyt, who owns a Charles (Swannie) Swanepoel¹⁴ (1932-2004) residence in Lynnwood (built in 1969), heightened their appreciation of this architectural period.

The brief from the client was clear and unequivocal, rational and poetic. They wanted a Craig Ellwood house grounded in Pretoria; a small house that revolved around the kitchen, with an L- or H-shaped plan and a courtyard to give privacy in surroundings where aesthetic guidelines prohibit the construction of any fences. Thomashoff was presented with a detailed site survey and photographs, indicating what had to be taken into account – this included pictures of ground and flower colours found on or near the site. The house had to be ‘quiet and [should] not draw attention to itself’, while the accommodation had to include a public and a private wing with the kitchen at the centre to facilitate entertaining. The house had to be ‘contemporary’; had to ‘refer to local residential architecture of the mid-20th century’ (in turn influenced by the Case Study Houses of the 1950s); the design had to ‘integrate the views of the landscape and the surrounding open spaces without sacrificing privacy’; [and it had] ‘to incorporate principles of sustainability’ (<http://www.artefacts.co.za/main/Buildings/bldgframes.php?bldgid=10111&archid=2320>).

MONAGHAN FARM

‘Monaghan farm lies between Johannesburg, Tshwane and Mogale City [and borders on Lanseria international airport]... It [purports to offer] an alternative to the norm in estate living... breaking the mould and providing an alternative model in sustainability’ (Bailey, 2014:39). The promotional material on the estate website indicates that the farm is 1 260 acres (510 hectares) in size, with a 3km front onto the Jukskei river. Only 305 units will be built in tight clusters, leaving 78 percent of the land open to all, where ‘10 acres (four hectares) is dedicated to the growing of

through shared compartments and limited circulation routes. Particular attention has also been paid to the definition of external spaces and climatic control through north orientation and a courtyard protected from the, at times, gale-force southeast summer winds. Other formal inspirations are the rustic walls, functional compartmentalisation and thin profiled roof edge of a house by Piet Kruger in Westonaria (Wale, 1965:99). Functional inspirations are the finely detailed room dividers (Wale, 1965:92) and the brick *brise soleil* of Colyn and Meiring (Wale, 1965:38), recalling the early experiments of Norman Eaton in the Little Theatre in Pretoria and Gawie Fagan (1925-)¹¹ at Die Es in Camps Bay, Cape Town.

Thomashoff immerses herself in architecture to build a frame of reference. She doesn’t believe in style, but attempts to design houses that personify the clients she works with explaining that ‘you cannot grow as an architect or be self critical,

- 10.-11. House Ross exterior, Worcester (Anon, 1958:46) and House Ross interior (Anon, 1958:41)
- 12.-13. Philip Nel’s NG Kerk, Waterkloof, Pretoria (Author, 2014) and part plan (Courtesy of Thomashoff)
- 14.-16. Some of Classens’ houses. Left: House van Biljon, Pretoria (Anon, 1969:20). 15: House Classens, Brooklyn; cupulo at top of stairs onto roof (http://www.artefacts.co.za/main/Buildings/image_slide.php?type=2&bldgid=10613&rank=11 [accessed 9 November 2014]). 16: Classens’ House van Heerden, Pretoria (Anon, 1969:21)
- 17.19. Atrium house plan, Camps Bay, Cape Town, Meiring, Naude, Papendorf and Van der Merwe architects (Wale, 1965:75). 18: Brick screen, House Göldner, Colyn and Meiring architects, Stellenbosch (Wale, 1965:38). 19: Room divider, Baart and Cooper Architects, Bulawayo (Wale, 1965: 92)



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- 20.-21. Part of the Monaghan Farm with House Rooke at the bottom left of the right-hand side picture [accessed 28 October 2014]
- 22. Garden view (Rooke, 2012)
- 23. Views to the southeast are slowly revealed (Rooke, 2012)
- 24. Details of roof-extension pergolas (Author, 2014)
- 25. Clerestory lighting between roof beams in the living room (Rooke, 2012)
- 26. A view from the study looking towards the dining area, with the kitchen acting as circulation space. Note the axis extending views into the landscape (Rooke, 2012).
- 27. View of the courtyard between the two extended wings (Rooke, 2012)
- 28. Right: Early concept drawings with mirrored living and sleeping wings and a final hand-drawn rendered plan (Thomashoff, 2012)



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organic produce, herbs, cut flowers, botanical gardens' (www.monaghanfarm.co.za). The estate requirements are intended to engender excellence in design through contemporary architecture, influenced by early 'modernism'¹⁵ and the veldt context. 'There is a concern for green issues such as passive design [and] energy efficiency, and the use of renewable energies and compact, smaller houses [is] preferred'¹⁶ (Thomashoff, 2014). All houses must demonstrate 'an element of passive solar design and the ability to collect rainwater in tanks' (<http://www.monaghanfarm.co.za/wp-content/uploads/downloads/2014/07/MONAGHAN-FARM-ARCHITECTURAL-GUIDELINES-June-2014.pdf>). The estate architectural guidelines indicate that 'spacious, yet discreet, only single-storey structures that disappear into the landscape will be permitted. Roof and wall colouring, for example, will fall within a range of earthy colours that match the environment'.

The clients purchased two sites on the southern, and most private, edge of a cluster of four possible houses. The second site was bought to preserve expansive views to the southeast. A row of eucalyptus trees frames the site to the south, while two houses have subsequently been constructed on the northern edge. During 2013, the Rookes constructed their 'Case Study' house (Stand 47), cut into the site and submerged behind a constructed earth berm between the two sites.

THE ARCHITECTURE

Thomashoff has adopted a mediative regional approach in House Rooke, extending local and international placed-based, functional and constructional traditions. The design has its antecedents in the tents of Pretoria regionalism and her client's appreciation of the Case Study House program. The resultant architecture straddles the boundaries of tradition and modernity,¹⁷ in both imitative and inventive ways.

TOPOLOGY¹⁸

A row of existing Eucalyptus trees on the southern boundary and the extensive eastern view were the main topographical features that determined the location of House Rooke. The southern edge of the house aligns with these trees, views of which are framed from within the living area through clerestory windows. The landscape has been sculpted into veldt-covered berms, firmly anchoring the house in its site. The cut into the western edge provides some privacy to

the entrance, while minimising the impact of the extensive garage frontage¹⁹. The sloped site provided the opportunity for a stepped internal floor which, under the continuous roofline, allows both the living and main bedroom spaces to have higher volumes – similar to the organisation of Eaton's Anderssen house (1949–1951) in the Willows, Pretoria²⁰.

In contradiction to the closed-entry façade, recalling Ellwood's houses and Koenig's Case Study House #21, the rear of the dwelling is organised to slowly reveal, and directly respond to, the expansive views to the southeast. A ha-ha wall was constructed on this edge, to deal with safety and security and to enhance the continuity of inside and outside and extended views.

The relationship between building and ground straddles both the classic approach of the Case Study Houses and the more romantic landscape approaches of the Pretoria Regionalists. Hand-quarried raw slate flooring [crazy paving] (Poulsen, 2013) is used to connect internal and external realms, thereby blurring spatial boundaries and imitating the Pretoria tradition. Thomashoff wanted the veldt to touch the building but client concerns mitigated against this and, together with the unfor-

tunate orientation of pool and manicured lawn, these relationships remain confused.

The architecture is directly responsive to the climate, mainly through the north orientation of both wings of the building that pay homage to the courtyard plans of Cole Bowen and Piet Kruger. A balance of glazing²¹ and painted facebrick wall panels are an attempt to provide sufficient thermal mass in the Gauteng summer. Solar control is provided by eave overhangs on the north façades, formally combining roof overhangs like those used by Eaton and Stauch (Peters, 1998:137) and small pergolas such as those of House B at La Jolla, California. Unfortunately, the same care was not taken at the west-facing windows, where the garage provides very late afternoon shading but not enough to prevent summer overheating in the kitchen. There is also an inconsistency in the north shading of the living area, where the outside terrace roof steps back to expose the north façade and one bedroom window. Underheating²² also occurs in winter, which is partially the result of the glazed louvers that do not adequately seal. These are reminiscent of many Durban houses of the 1960s, such as Barrie Biermann's²³ (1924–1991) own house and Case Study House #23 House B at

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La Jolla. But its use is questionable in a climate where humidity is not an issue.

Thomashoff structures the use of light to align with issues of privacy and the heightening of spatial experience from a ‘closed’ western façade to full-height windows on the east. Between these two conditions, she provides clerestory glazing in a deft and partially concealed junction between roof and external wall, extending the Pretoria regionalists’ use of ‘unusual sources of natural light’ (Fisher, 1998:124) and floor-to-ceiling glazing. The relationship between dwelling and place is further reinforced through a clear logic in functional organisation.

FUNCTIONAL EFFICIENCY

The bi-nuclear²⁴ efficient planning of many Modern Movement dwellings is used to good effect in House Rooke, creating an inner courtyard, a central kitchen and north orientation for both wings. The typology presents a close and imitative correlation between the courtyard organisation of House Rooke, and that of the traditional plan forms of Cole-Bowen’s House Venter of the early 1950s²⁵ and Case Study House #23 House B, where a kitchen acts as circulation route between both wings. These organisational patterns had already been established in Thomashoff’s earlier houses, particularly in Eldoraigne. But spatial continuity is better handled in House Rooke, through axes along circulation routes that link internal realms directly to the landscape in either direction, recalling Konya’s seminary layout. Some rooms also become circulation devices – imitating the efficient and economic layouts of Cole-Bowen and Stauch. Terraces outside the kitchen, living room and main bedroom extend internal realms in similar ways to the limited internal spaces of the Case Study and Pretoria Regionalist houses.

A number of design iterations were undertaken to determine the location of the bedroom wing, initially placed on the southern edge of the site. The final solution provides privacy for the living area, in accordance with the design guidelines, but leaves the bedroom wing rather exposed to its new neighbours. Internal privacy is heightened through clerestory windows in bathrooms, which create relief from spatial continuity but result in introverted spaces – unlike many bathrooms of the Case Study House program and Pretoria Regionalists, which were often cleverly concealed but well lit and serviced by internal or external courtyards. Notwithstanding, the advantage of high-level windows and continuous wall panels serve the clients’ need for surfaces to display their extensive art collection.

The principle of compartmentalisation is extended in House Rooke, particularly in the design of bathrooms, but more subtly in the suspended storage units of the kitchen and low bedroom cupboards of the children’s rooms. These approaches are partly imitative of the Case Study House houses of Koenig and many 1960s houses, such as Fagan’s 1967 House Raynham in Newlands, Cape Town. The rigorous application of functional efficiency is closely tied to, and reinforced by, the constructional logic of the building.

CONSTRUCTIONAL RATIONALISM

The tectonic logic of House Rooke synthesises the constructional rationalisms of the steel-framed Case Study House houses and the grid organisation of many Pretoria Regionalist houses of the time, guided by the 3’4” standard steel window module. Although Thomashoff is acutely aware of the proportioning system inculcated through Anton du Toit, her fifth-year studio master, she has adopted a 900 x 1 000mm grid layout that seems devoid of

constructional or proportional informants – save for the possibilities of an appropriate door width or module for a comfortable bedroom. Notwithstanding, the synthesis of elegance and lightness in the steel frame, and conjoined rusticity and solidity of the stereotomic brick wall, successfully mediate the intentions of the two overriding tectonic precedents. Although overtly imitative in many of its derivations, the simply articulated junctions of the seemingly disparate technologies and a heightened attention to detail from floor to roof are inventive contributions.

The ground plane of organic slate closely recalls the designs of Cole-Bowen and Stauch, in the way that it merges indoor and outdoor space and resists the more ordered, tiled layouts of Ellwood’s Case Study House houses that achieve similar spatial conditions. Unlike the expressive nature of the Case Study House’s steel frame, Thomashoff aligns a similar vertical structure alongside the painted facebrick²⁶ walls, thereby blurring the distinction between structure, infill, openings and internal and external realms. An innovative extension of Pretoria Regionalists and Case Study House approaches is the use of steel-framed breezeblocks that form raised screens to create areas of partial privacy. The rusticity of Pretoria Regionalism is tamed through the use of painted smooth facebrick, resulting in a more Modern Movement planar architecture.

The most inventive tectonic aspect is the design and articulation of the roof. It partially negates the flat-roofed Case Study House idiom and relies more heavily on the mono-pitch of the Pretoria Regionalists and Thomashoff’s own predilections, as is evident in her Eldoraigne and Menlo Park houses. To achieve as thin a roof profile as possible, the steel-sheeted roof covering caps a complicated truss of partially exposed horizontal beams and angled rafters

at 1.8m centres. These span the width of the building and extend outwards to frame individual pergolas on northern edges. The beams are truncated on the opposite side but are still exposed, reflecting their supporting – and space defining – role. These structural elements also create a spatial rhythm internally, while partially obscuring the sloped ceiling. This approach synergises the related roof designs, but extends the traditions in an innovative manner through the raised glazing panels located between the ceiling beams. Direct natural light is diffused downwards into spaces and provides privacy to bathroom areas, avoiding punctures in the wall panels.

Except for the natural slate floor and thinly profiled aluminium shopfront doors and windows, all other materials are painted. This hides their natural condition, formally sublimating the technology. Joints are also hidden internally and only expressed in the simple and continuous junction of roof beams and external columns, thereby resisting an imitative architectural approach.

CONCLUSION

In 2013, House Rooke received a regional Pretoria Institute of Architecture *Award of Excellence* for architecture and was nominated for a national SAIA award. Competing with pseudo neo-Modern Movement residential architecture, its simplicity overrides their material and spatial exuberance. The traditive nature of Thomashoff's architecture provides a sense of timelessness, in an estate that seems to have developed a more appropriate approach to the making of architecture than most such problematic environments. 'The building sits unobtrusively in the landscape, blending in with the surroundings, and accepts the dramatic Highveld weather patterns and seasons with dignity' (Poulsen, 2013).

Much can be learnt from Thomashoff's revised architectural tradition. Her architecture is a contextually appropriate synthesis of the tenets of Pretoria regionalism and the Californian Case Study House program. It extends local mediative regional responses through a creative revision of topological, functional and construction traditions. The fortunate 'cultural linkage' between client and architect has fostered an imitative *and* inventive solution for the 21st century, that grounds House Rooke in both place and history. Through this process, modernity is honestly authenticised and extended into a true regional architecture.

29. Breezeblocks in steel frames (Rooke, 2012)
30. View from outside the main bedroom, showing articulation of the roof (Rooke, 2012)

- ¹For a more detailed interpretation of the facets of architectural regionalism, see Barker, 2012a, pgs 107-118.
²Here, Fisher summarises Gilbert Herbert's description (1975:167) of Eaton's romantic approach to architecture.
³Other authors, such as Gössel et al (2008:8), suggest that the program came to an end in 1966.
⁴In 1946, under US government restrictions, enclosed living space was limited to 110m² (McCoy, 1977:13). No doubt this influenced the use of covered patios to form extended living spaces in the equable California climate.
⁵Peters (1998:1885) notes that Neutra visited South Africa in 1958 and 1961.
⁶They were the main protagonists of the Case Study House program through John Entenza and his *Arts and Architecture* magazine, published from 1945 to 1949.
⁷George Wilsenach worked with Karl Jooste during the 1960s.
⁸See Wegelin, Hans, 2013. Parabolic roof. *Architecture SA*, 2013/64, pp 47 and *Architecture SA*, Nov/Dec 1981.
⁹Konya graduated from the University of Pretoria in the late 1950s and emigrated to the United Kingdom in the early 1980s. He has published widely, most notably *Design primer for hot climates* in 1980.
¹⁰International Working Party for Documentation and Conservation of Buildings, Sites and Neighbourhoods of the Modern Movement, established in 1965.
¹¹Gawie Fagan graduated in 1951 from the University of Pretoria, with a regional modern architectural education. He is the country's most awarded architect, successfully creating his own regional architecture that synthesise modernity and place in the Cape. Die Es is Fagan's own house, which was built in the early 1960s.
¹²At the time Gavin commissioned Thomashoff, he co-owned an art gallery with an ex-Pretoria-trained architect Roelof Petrus van Wyk, who had been a classmate of Thomashoff at the University of Pretoria. Roelof suggested her as architect and made the introductions.

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¹³<http://www.stand47.co.za/>
¹⁴Charles Swanepoel retired from teaching at the University of Pretoria's Department of Architecture in 1997, after 40 years of service. His own 1969 house continued the Pretoria regionalist tradition through its attenuated plan, north orientation rustic facebrick and innovative Perspex-sheeted sliding roof over an external courtyard.
¹⁵The architectural guidelines mention architects like Norman Eaton, Gawie Fagan and Glen Murcutt, which is certainly not 'early' modernism.
¹⁶The architectural guidelines indicate floor areas between 150 and 1 000m².
¹⁷In this context, modernity refers to the features of modern times and the ways these are experienced... and illustrates that current existence is constantly changing and transforming (Heynen, 1999:9-10).
¹⁸Greek for 'the study of place'.
¹⁹Prohibitive costs determined that the cut and fill had to be reduced, and the house was moved further eastwards.
²⁰See Harrop Allin, 1975:80.
²¹Single glazing was installed before the new SANS 204 regulations were enforced. Thomashoff indicates that there is some discomfort all year round, due to the amount of glazing.
²²This problem has been dealt with by the unfortunate inclusion of under floor heating in the screed.
²³Barrie Biermann, along-standing member of the Department of Architecture at the University of Natal, was greatly influenced by Cape vernacular architecture and Brazilian Modernism and advocated a regional architecture.
²⁴This refers to the separation of living and sleeping spaces.
²⁵See *Architect and Builder*, April 1953 pp42.
²⁶These bricks were specifically chosen for their regularity and consistency of shape. Unfortunately, two batches of brick did not match and the difference is partially visible, even through the paint layers.
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