HOMAGE TO THE RIGHT ANGLE

AN EXPLORATION OF HOUSE _DERICK

In *house_derick*, Derick de Bruyn’s precise design method — or architectural ‘autograph’ — can be found, which is best described as equal parts practicality and poetry.

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ABSTRACT
This paper explores Derick de Bruyn’s most recent project, house_derick. It tracks the architectural influences that inform his particular design approach to residential architecture, using his own home as the explanatory device. For the purposes of this paper, his approach is called his autograph (the architectural design signature that is evident in all his projects) and consists of three themes. It considers in particular the influence of Charles Swanepoel on his architectural training at the University of Pretoria, as well as his relationship with Jack van Rensburg, as being formative in developing his own approach to site, context, infrastructure and services in architectural design.

The paper is structured in four parts. The first is a description of what is put forward as the autograph; those processes that inform practice. The second is an introduction to Derick de Bruyn and house_derick, with the third taking the form of his design process or autograph. The last part looks at his autograph, as it plays out in house_derick.

PRELUDE: THE ARCHITECT’S AUTOGRAPH
While theory, politics, technology, sustainability, social justice or affordability might deeply inform the way in which architects practise architecture, the method or approach that architects follow when designing buildings becomes a most distinguishing factor in their oeuvre. Each develops a particular set of tools when thinking about the design of a building reflected in, for example, the use of a grid, or a preference for certain materials, or even a particular form. These preferences begin to be identified in different buildings by the same architect, much like a ‘signature’. As each architect’s success grows, their signature begins to be recognised and desired by clients who value their approach and, eventually, their signature morphs into an autograph.

An autograph is desired for its consistency (and at times the associated prestige). While there may be some adaptations to the given context, the autograph represents a welcome familiarity. It symbolises those design elements that repeat, giving rise to recognisable patterns that often become aesthetic preferences.

For the practising architect, the architectural autograph reflects a position and an approach to architecture.

INTRODUCTION
Over the past two-and-a-half decades, Tshwane-based architect Derick de Bruyn has realised a number of residential projects in South Africa. Each embodies his particular design style, which is rooted in Modernist and Minimalist traditions. Some of his residential buildings have been published in Ora Joubert’s 10 years + 100 buildings (Joubert: 2009) and they begin to reflect the autograph of his architectural design approach. He has designed two houses for his own use, house_mabet (1996) and, more recently, house_derick (2015), and in both the autograph emerges from a similar atmospheric quality that seems to have been created in each, even though their context (in the broadest sense meaning site, year of construction, users and socio-political environment) is substantially different.

However it is possibly in house_derick, which he designed for himself, that we see the pure embodiment of his design approach unencumbered by clients, family or even by a scenic site. House_derick reflects de Bruyn’s precise and exact method of design based on equal parts of practicality and poetry. To describe it succinctly, would be to say that de Bruyn’s architectural autograph is an homage to the right angle.

Situated in a small and compact gated estate bordering on the northern edge of the Faerie Glen Nature Reserve,
at first glance the house reveals very little behind its slick and impressive front façade. The composition of the south-facing street façade consists of a bagged brick wall, with a portion made up of a timber screen and clerestory windows below a ‘floating’ concrete roof (Figure 1). It is by no means overpowering. Rather, this public ‘face’ builds curiosity in the visitor’s mind, while for the resident it provides vantage and privacy in a cramped estate. Upon entering the home, it is clear that it has been designed to form the perfect habitat for its architect-resident, reflecting his interests and making home of the things that matter most to him at this stage of his life.

With his grown-up children on their way out of the family home, the opportunity to downscale and design a home attuned to his own interests and preferences could be realised. The smaller size of the house meant that unnecessary items could be purged, keeping only those of importance and sentimental value. Among such valued items are his art collection consisting of various local and international artists, and his extensive library of anything (and everything) architectural. The white bagged brick interior walls intentionally form the bare architectural canvas against which these items of personal importance are featured (Figure 2). With the architecture stripped of decoration, in keeping with Modernist traditions (Rybczynski, 1987: 188), art and furniture become the ornament. However, this house does not feel like a cold warehouse. It feels homely, human scaled and a well-suited habitat in which de Bruyn’s interests and persona can flourish.

De Bruyn (2015) suggests that buildings are often designed with ambitions to redefine place or to provide or reflect identity, but then people do not necessarily appropriate nor appreciate them. Therefore, he supports the understanding that architecture derives from the event encapsulated by the building, which only comes to life when people make claims to a building.

The second theme, which is linked to the first, is the notion that buildings should relate to human experience and human scale in order to remain relevant, over time, to their users. That is, the design of residential space should be focused on human experience in the execution of daily rituals that are mostly mundane (with the exception of dinner parties, which occur against the backdrop of the building, for which the architecture is almost consequential).

DE BRUYN’S STRAIGHTFORWARD AND UNCONTRIVED DESIGN APPROACH HAS THREE IMPORTANT THEMES. FIRST, BUILDINGS ARE PROPS THAT ALLOW FOR LIFE TO UNFOLD WITHIN THEM...

Thirdly, [he stresses] the importance of using design tools like modular co-ordination as the basis for proportional design resolution. In this, the grid plays an important role, derived in this case from the proportions of a brick. In addition, the importance of defining service cores to free the remainder of the house from services, becomes a critical feature in the use of modular co-ordination. The third theme is of particular interest in identifying the autograph in de Bruyn’s work, especially when tracking some of the influences that have shaped his thinking.

A formative influence on his design approach was Charles Swanepoel or ‘Swannie’ (1932-2004), who was his undergraduate design and building science lecturer during the 1980s at the University of Pretoria. Swanepoel emphasised the importance of designing buildings

DE BRUYN’S AUTOGRAPH – HIS DESIGN APPROACH

De Bruyn’s straightforward and uncontrived design approach has three important themes. First, buildings are props that allow for life to unfold within them. Put another way, they provide the scenography in which the event unfolds and thereby forms the architecture. This is a key theme in his work, resulting in design that is understated, yet considered; modest yet effective.
that were based on modular coordination. Based on the dimensions of a brick as a *module*, the design was required ‘to work out’ so that not a single brick would need to be cut. Swanepoel also exposed de Bruyn to his first set of working drawings, forming a decisive point in his architectural education.

Another major influence was his close relationship with his father-in-law, Jack van Rensburg (1931-2010), as evidenced in their collaboration on house_mabet. In some ways this house is the predecessor to house_derick, with its textured walls, service cores and edge-detail tolerances. Both Van Rensburg and Swanepoel practised the same school of architectural thinking. They were trained at the then-recently-independent University of Pretoria’s School of Architecture during the 1950s, with lecturers Robert Cole Bowen (1904-1976), Hellmut Stauch (1910-1970) and, to a lesser degree, Basil South (1915-1952). This exposed them to the Modernist tradition (Steenkamp: 2003) but with an increasingly nuanced approach to local conditions; one which is often referred to as Pretoria Regionalism (Fisher et al: 1998). Their work embodies a practical simplicity, which de Bruyn has refined in his own projects. These buildings do not try to do too much – they are functional, frugal and unpretentious. Their beauty lies in their minimalism.

**AUTOGRAPH WITHIN THE ARTEFACT**

All three themes identified in de Bruyn’s autograph are evident in house_derick: building as the vessel for event, consideration for human scale and functionality and, lastly, modular design tools.

At the site, scale decisions were made to deal with the awkward properties of the site – its narrow dimensions, encroaching development blocking views and hindering privacy, as well as the slope. In dealing with the shape of the site, the building was positioned close to the street edge and in line with an adjacent property. The narrow site was responded to by creating a building with two levels: a more public ground floor which opens onto the back garden and forms the setting for parties or recreational space; and a more private first floor containing the main living areas and bedroom. The double storey, tentatively reminiscent of a contemporary version of a Dutch Row House typology (Rybczynski, 1987: 55), caters for the fall of the site with a vertical threshold created by a fish pond between the garden and the open ground floor. The ground floor is level with the driveway and contains the garage, storage rooms, services, entertainment lounge, and a cool and spacious verandah in which de Bruyn spends most of his time in summer reading or entertaining (Figure 3).

Views from the site are limited by commercial and residential development in the foreground, hindering vantage and vistas. However a distant ridge, visible from the north facade, forms a prominent horizon line with urban infrastructure emerging out of it that often becomes the scene for watching a highveld thunder storm. On the south, the Faerie Glen nature reserve koppie is visible through the clerestory window. The house lives out to the north (Figure 4). It has no visual connection to the properties along the eastern or western edges of the site, and only discreet features on the southern, street-facing edge. The bare and blank walls of the adjacent buildings create a tension between the properties (Figure 3), and the illusion of a grotto, which is partially exposed to the elements and partially enclosed. When it rains, water cascades down these walls, emphasising this experience.

At the building scale the house ‘grows’ from a central service core, which contains all the essential services that usually encumber and dominate buildings: plumbing, electrical conduits and down pipes. In response to Reyner Banham’s *A home is not a house* (1965) critique, against houses that are built around complex services (which become more important than the house itself), de Bruyn frees up the scenography by placing all the infrastructure and services (including bathrooms, storage rooms, electrical conduits, chimney flue, downpipes, rainwater tank and service rooms) within a central core that connects both floors and extends through to the roof. As is the case with Mies van der Rohe’s Farnsworth house (1946-1951), the service core allows for the services to ‘fall away’ (Figure 5) so the rest of the house can be freed from their constraints.

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**6 & 7 Two sections, through the core and the living room, showing the two levels, the service core and the structural composition.**
(Gössel & Leuthäuser, 1991: 226). However, contrary to the Farnsworth house, the service core also serves as the load-bearing centre point where some of the structural steel roof beams, that carry the cantilevering roof, rest.

Much of de Bruyn’s work is influenced by images of the post-WWII American dream, which children of his era aspired to. Designers like Raymond Loewy revolutionised the image of an ideal American lifestyle, from the cigarettes to the car parked outside the architect-designed Hollywood house. The Case Study programme in Los Angeles (Gössel & Leuthäuser, 1991, 212) formed an extension of this ideal and its carefree lifestyle. Julius Shulman’s 1960s Case Study house photographs capture the architectural event, in the form of the parties that took place in the open-plan spaces between the kitchen and the swimming pool. The house vanishes from importance, with the atmosphere it creates forming the focus. Later on, as a student of architecture, de Bruyn explored the Case Study programme with its escapist atmosphere, innovative use of modular materials and flexible plans.

In house_derick, it was particularly the work of Pierre Koenig in Case Study House #22, otherwise known as House Stahl, which inspired the design of the cantilevered roof. While Koenig used metal decking, metal could not carry the loads between the spans in house_derick. A rib and block slab would have required so much cast-in-situ concrete, in the end the entire slab would have become cast-in-situ and exposed. The edges of the slab were cast within steel I-beams, which form neat upstands. Below these, a continuous clerestory window provides a visual ‘escape’ to the ridges far beyond (Figure 6&7).

The house is based on a 450mm by 600mm module, forming a square plan (Figure 8&9). The whole house is based on the module of the brick, from the driveway right through to the bedroom. This modular system picks up the edges of openings, with a tolerance zone that is designed to be filled both to accommodate the rough infill brickwork and the builder’s inaccuracy. Everything between the tolerance zone is on a module. Doors and windows then have shadow-lines between the frame and the rough walls. Light becomes an important building element, casting shadows on white bagged brick interior walls, while cosy spaces on the first floor are made to feel larger because of the service core and the glazed northern façade. Vertical and horizontal dimensions are all in proportion to this module. De Bruyn says, ‘It’s terribly stiff, but I love it’ (2015). In many ways, the module provides the framework from which nuanced details can arise. The delight of this system lies in the complexity that results from order.

CONCLUSIONS

De Bruyn seems to suggest that there is not much to house_derick. However, when the house is seen not as an object but rather as the autograph of the architect, there appears to be much more to it. In some ways, it is autobiographical in its references to the experiences and events that have influenced de Bruyn’s life and his position as an architect. It is also a snapshot in time, reflecting his current interests and ambitions for the future. But mostly, the building is a reflection of his architectural autograph; his particular approach to architectural design. The strict design rules to which he abides help him to solve the puzzle of a new site and brief. In their simplicity, an intriguing even poetic complexity is revealed.

In de Bruyn’s own words, ‘I don’t believe a building is [made] interesting by making it interflora, because if I look at a building […] there is a complexity that comes through without one having to manipulate every corner. I appreciate it and a lot of people are good at it; I am not, so I [pay] homage to the right angle. I believe in 90 degrees’ (2015).

REFERENCES:


