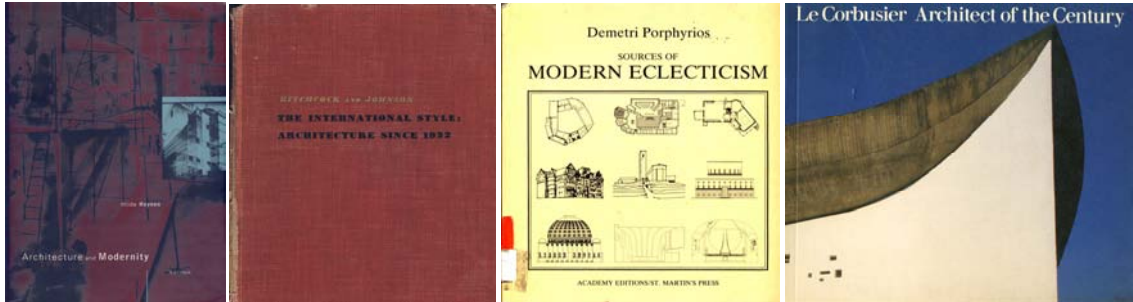


Chapter 4

MODERN MOVEMENT MEDIATIONS



Architecture and Modernity cover (Heynen, 1999). *The international style: architecture since 1922* cover (Hitchcock & Johnson, 1932). *Sources of Modern Eclecticism* cover (Porphyrios, 1982). *Le Corbusier: Architect of the Century* cover (Raeburn & Wilson, 1987).

This chapter positions Gabriël Fagan's work in relation to the Modern Movement:

Modern Movement terminology will be explained.

The development of the Modern Movement as a series of phases will be outlined.

A similar phased development of the Modern Movement in South Africa will be described.

The genesis of Fagan's Modern Movement responses will be explained.

4.1. Introduction

[I]t has also become important to understand the traditional background and education of modernists in order to see what was rejected and what transformed (Blundell Jones, 1995:7).

Fagan was educated at an important juncture in the development of architecture in South Africa. The orthodoxy of Modern Movement teaching at the Department of Architecture at Witwatersrand University (Wits) under Rex Martienssen had waned as architects realised the technological and stylistic inadequacies of universalist solutions. Paul Connell⁹⁹ (1945:164) explains that the contemporary architectural idiom did not find favour with the general public, that architects had become undisciplined in the use of the clear prismatic forms and that the flat roofed buildings weathered badly. The establishment of a new Department of Architecture and Quantity Surveying at the University of Pretoria in 1943 provided an impetus for this new direction. The course focussed on pragmatic ways of solving problems within a mediated Modern Movement canon, more regional in nature and later inspired by Brazilian Modern trends. Fagan arrived four years after the department was established and was probably fortunate to miss an orthodox Modern Movement training. The original tenets were, however, still important and relevant for architects as they espoused contemporary ways of making functionally and technologically appropriate architecture.

Na die Tweede Wêreld oorlog, toe die moderne argitektuur aan geloofwaardigheid begin verloor, soek elke land sy eie heil; en dat Suid-Afrika vroeg in die jare sestig op dreef kom moet ons dank aan die geslag waarvan Gawie Fagan een van die leiers was. Sy persoonlike bydrae het die klem laat val op beskeie maar deurdagte ontwerp, deeglike vakmanskap, en in besonder, daardie waardige eenvoud wat deur die eeue die beste in ons boukunstige erfenis kenmerk (Biermann, 1975:1).

[After the Second World War, when modern architecture began to lose its credibility, every country searched for its own salvation; and for the fact that South African architects got into their stride in the early sixties, we have to thank the generation that Gawie Fagan was one of the leaders of. His personal contribution emphasised modest but thoughtful design, thorough craftsmanship and, in particular, that true simplicity that marks the best of our built heritage over the centuries.]

But where did this mediated Modern Movement response originate? What were the Modern Movement tenets that Fagan adopted and how did these impact on his appreciation of South Africa's inherited vernaculars? A brief description of Modern Movement origins and its mediated development will highlight Fagan's architectural context and the beginnings of his approach

– ⁹⁹ See Appendix J.

which will be described in Chapter 7. Firstly, the relevant and somewhat confusing arrays of Modern Movement terminology will be described.

4.2. The Modern Movement – definitions and clarifications

The root of the word ‘modern’ in Latin is *modo* meaning ‘now’. Hilda Heynen (1999b:10) notes that the word ‘modern’ has developed three different meanings over time. The first meaning refers to that which is contemporary and up to date (and is probably the closest to its Latin derivation), and Jencks concurs (1985:7) when defining it as current. The second meaning was initiated in the 17th century to distinguish new as opposed to old and a third 19th century definition refers to modern as a transient or momentary condition that is indeterminate.

Heynen (1999:9-10) notes that the term ‘modernity’ is an exclusively Western concept that describes the features of modern times and the way that these are experienced by people. It illustrates that the future will be distinct from the past and that current existence is constantly changing and transforming. It is a construct that mediates between its objective social goal of *modernization*¹⁰⁰ and its subjective outcome or experience through movements such as the *Modern Movement*¹⁰¹ and modernism, these being in sympathy with a future orientated direction and the need for advancement. Heynen (1999b:11-14) also argues that modernity vacillates between programmatic and *transitory* concepts as well as *pastoral* and *counterpastoral* views. As Giddens points out, modernity is a condition that requires architects to transform existing conventions to give it meaning (Pelkonen, 2009:7).

Proponents of a *programmatic* modernity view it as a project of advancement and liberation. It views modernity from the perspective of the new to distinguish it from that which has gone before and thus relates to Heynen's second definition of modern. A *transitory* view of modernity expresses the desire for innovation that does not oppose tradition to achieve progress but reacts to it through endless change, ultimately losing focus through a reciprocal re-evaluation of itself and thus relates to Heynen's third view of modern. The internalised condition thus negates the progressive nature of modernity. This is echoed by Jencks (1985:46) when he refers to a *self-conscious* Modern Movement tradition that demonstrates a reflective and paralytic approach.

A *pastoral* view of modernity relates to the heroic period of the Modern Movement, or as Jencks (1985:31) refers to it, the *idealist tradition*. Here any contradictory aspects specific to the modern are ignored and a singular goal is sought. Progress is seen as harmonious and continuous.

– ¹⁰⁰ Heynen (1999a:10) indicates that modernization refers to the processes of social development, the results of which are technological advancement and industry.

– ¹⁰¹ This term will be used in this thesis as it encapsulates a broad range of responses to issues of modernity.

This is reflective of the many limited statements that have been made about the Modern Movement and its supposed coherent approach to architecture. But authors such as Jencks (1985), St. John Wilson (2007) and Curtis (1996) have contested this view. Jencks (1985:11-29) postulates that there was not only one ideology within the Modern Movement, but that a lively plurality and six traditions of architecture existed between 1920 and 1970. St. John Wilson (2007:40) suggests that a parallel movement to orthodox modernism formed around 1928 after the conflict of opinions at the *Congres Internationaux d'Architecture* (CIAM) meeting. This correlates with the *counterpastoral* view of modernity that Heynen (1999b:13) characterises as a conflict between economics and culture, the disintegration of a holistic experience of life, and the autonomy of some domains (such as art) that cannot regain their common basis. It is a conflict between a modernity of progress and a modernity that recognises that it could possibly self destruct that fostered Modern Movement tendencies more aligned with tradition and place.

Marshall Berman argues that for the individual the experience of modernity is characterised by a combination of programmatic and transitory elements, by an oscillation between the struggle for personal development and the nostalgia for what is irretrievably lost ... [W]hen it comes to formulating answers to the challenges of modernization, he discerns an abundance of insights coupled with a sharpness of tone in nineteenth century writers such as Baudelaire, Marx, and Nietzsche that originates in their constant struggle with the ambiguities and contradictions of modern life. There is a tension in these writers between pastoral and counterpastoral views: they were at the same time enthusiastic supporters and deadly enemies of modernity, and it was precisely this that gave them their creative power (Heynen, 1999b:13-14).

The subjective outcomes of mediations that occurred within modernity shaped themselves as movements in architecture and have been variously defined as Modernist or Modern Movement.

For many authors, the term 'Modern Movement' tends to be a bit more specific and polemic, referring to those architects who explicitly joined forces with other modernists, for instance through an alliance with CIAM, the *Congrès Internationaux d'Architecture Moderne*. Although the concept itself of the 'Modern Movement' has been repeatedly criticized as incorrect and misleading (because it suggests that there was a unified and consistent set of ideas to which all its proponents adhered), it has survived these attacks, probably because it expresses so well that modernism was 'not a style but an issue' (Heynen, 1999a:24).

4.3. Modern Movements

The Modern Movement enjoyed its richest flowering and attained its historic prestige during the decades between the two World Wars, when it was born in a spirit of renunciation of the old world, a commitment to addressing mass housing

needs, and an enthusiasm for exploring the architectural potential of materials and technologies often disdained by the previous generation (Ghirado, 1996:8).

4.3.1. The first Modern Movement

The first Modern Movement was the most coherent (albeit dogmatic) approach to the pressing issues of the time. At its core was the pursuit of the new and a reaction against the stagnant use of tradition. It mediated, amongst other concerns, between the modern and the classical, autocracy and democracy, and craft and industrialization. The movement expressed a *programmatic* and *pastoral* view of modernity. Jencks (1985:31) refers to this period as the *Idealist Tradition* (the centre of 'Modern Architecture'), while others (Bullock & Stallybrass, 1986:395) define it as a *Paleo Modernism*. It has also been referred to as an *Avant-Garde*, the term being borrowed from the mid-19th century anti-bourgeois movement where artists were at the front line of cultural action (Jencks, 1985:371). Chipkin (1993:155) notes that Le Corbusier referred to a *modern conception of architecture* after the First World War, while Joedicke (1945:10) defines the first period of the Modern Movement as being from 1917-1929. The architect and writer Juhani Pallasmaa¹⁰² (1988; 2007:137) suggests that, in an architectural sense, the first phase of modernity was utopian, idealistic and formally aspiring to immaterial and weightless movement.

Architects like Le Corbusier, Mies van der Rohe (see Fig. 4.1) and Walter Gropius held common beliefs about the human condition that bordered on a social utopianism (Jencks, 1985:31). It was a period of idealism and architects believed that a new social order could be established through the advances of technology. In architectural terms this was exemplified by the possibilities inherent in new technologies like reinforced concrete, along with Le Corbusier's (see Fig. 4.1) 'five points for a new architecture' and 'house as machine' metaphor. The heroic period of modern architecture had established itself through canon.



Figure 4.1. Left: Le Corbusier and Van der Rohe in Stuttgart in 1926 (Chipkin, 1993:166). Right: Le Corbusier's five point plan for a new architecture 1929 set against a traditional model (Benton, 2006:22).

— ¹⁰² See Appendix J.

4.3.2. The second Modern Movement (avant-gardism and traditionalism)

The second period of the Modern Movement is defined by Joedicke (1969:16) as spanning a period of ten years from 1930 to 1939 that is in Europe until the Second World War began. He suggests that modern architecture had spread across Europe in variations influenced by climate, topography and tradition:

In the 1930s, the filtering down, extension and elaboration of central principles of modern architecture was complicated and enriched by the growth of new branches far from the points of origin, sometimes in places with quite different climates, traditions, social projects and ways of building (Curtis, 1996:305).

The expressions of modernity were certainly still *programmatic*, but after the CIAM conference of 1928 St. John Wilson (2007:15) argued that another tradition of Modern architecture was formed as an inner critique of *pastoral* Modernity:

What has not been so commonly recognised is that, at that moment, a sort of 'Resistance' was born – not a Resistance Movement (for there was no organized structure like the established congress) but a widely dispersed constellation of architects in whose work the original intentions of that Movement lived on unabated.

Frampton (1986:192) notes that Aalto combined the canons of the Modern Movement with those aspects of tradition aligned with a National Romanticist sensibility. Porphyrios (1982:2) agrees when defining Aalto's work as reacting to the homotopic organization of a *programmatic* modernity, while Giedeon (1971:618) refers to Aalto as attempting to re-establish a link between life and architecture. This is an important point to consider concerning Fagan's work as he mediated the requirements of modern life and place, aptly described by the statement below.

Pallasmaa (1998; 2007:137) defines a second modernity as one which

... frequently expresses gravity and a sense of materiality and earth. The return of earth and gravity as expressive means of architecture has more than metaphoric meaning; after its arrogant and utopian journey, architecture has returned to the safety of Mother Earth, back to the sources of rebirth and creativity ... The interdependence of architecture and culture has not been sufficiently recognized ... [T]he Second Modernity has to relearn a way of seeing architecture as part of cultural tradition as well as analyzing the timeless essence of architecture.

The first rumblings of an inherited Modern Movement¹⁰³ in South Africa were recorded by Stanley Furner¹⁰⁴ (1892-1971) when he became head of the Wits School in 1925 and editor of

– ¹⁰³ This can be regarded as a second Modern Movement, in the international sense, due to its European inheritance.

– ¹⁰⁴ See Appendix J.

the South African Architectural Record (SAAR) in 1926¹⁰⁵. His publication 'The Modern Movement in South Africa' was, according to Herbert (1967:26), a seminal piece for the future of architecture as it expressed a clear understanding of the logic and philosophy of modernity, steering skilfully clear of issues of style and aesthetics. Thereafter the limited influence of a *transitory* modernity on domestic architecture in South Africa in the 1930s (Curtis, 1996:306) was pioneered by Rex Distin Martienssen (1905-1942) who qualified from Wits in 1930. Lipman (1962:12) describes the quality of this new architecture:

While giving its occupants a new experience of nature, it confirms that it is a man-made object, and its crisp, clean lines do not make any attempt to blend with the topography or the foliage as, say, a Basuto hut would as they make a clear statement of man's agency in nature. The statement speaks of the new century's love of clean, simple line, shapes that contrast their rectilinear completeness with the arbitrary and endless fecundity of the world around them (Lipman, 1962:12).

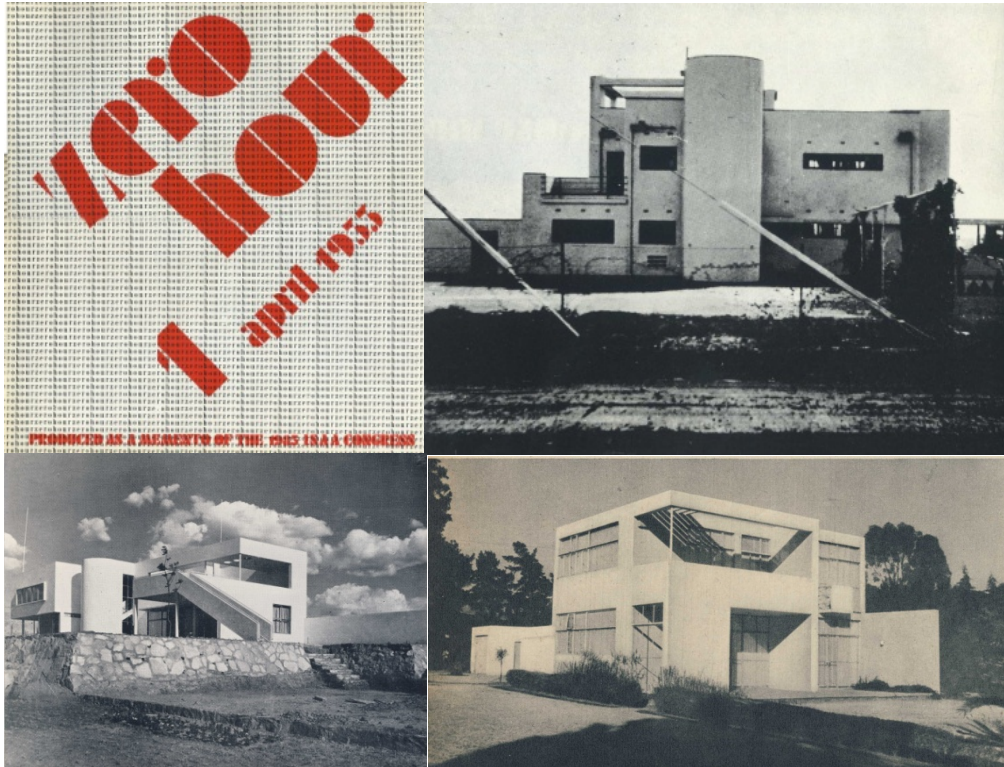
Martienssen's direct contact with Le Corbusier paved the way for the distillation of Modern Movement tenets mainly in the Transvaal, after he had taken over the editorship of the SAAR in 1932. Together with a small band of like-minded protagonists, Gordon McIntosh (1904-1983) and Norman Hanson¹⁰⁶ (1909-1991) later referred to as the Transvaal Group, Martiensen forged an alliance that led to the publication of *zero hour*¹⁰⁷ (sic) on 1 April 1933 (Gerneke, 1998:209) (see Fig. 4.2). This manifesto proclaimed the virtues of a new technologically and functionally driven architecture and was widely disseminated, even to the master himself. It was well received by Le Corbusier, who published the letter he wrote to Martiensen (see Fig. 4.2) in his *Oeuvre Complète* (1919-1929) of 1936. In the 1930s a small number of Le Corbusier inspired houses were built, such as House Munro in Pretoria by McIntosh in 1932 (see Fig. 4.2), House Harris in Houghton (1933) (see Fig. 4.2), Johannesburg, by Hanson, Tomkin and Finkelstein and the climax, House Stern (1934) (see Fig. 4.2) in Johannesburg by Martiensen, Fassler and Cooke.

[This] new trend, known as the "International Style", is characterised by pure forms, as the cube and cylinder, by the juxtaposition of single and double volumes, by smooth white surfaces and by flat roofs. Martiensen, Hanson, McIntosh and others, following closely the main stream of the movement in Europe, investigated spatial interpenetration, whereby space is used as a flowing and dynamic element (Teeger, 1965:6).

– ¹⁰⁵ He remained editor until the end of 1928 when he returned to private practice (Herbert, 1975:21).

– ¹⁰⁶ See Appendix J.

– ¹⁰⁷ This manifesto was dedicated to the first professor of architecture at Wits, Geoffrey Pearse. It summarised the intentions of the zero hour (sic) Group that wished to 'create a living architecture in South Africa' and 'become a universal guarantee of quality and perfection in design and service' (Herbert, 1975:95).



Paris, 23 september 1936.

My dear Martienssen,

It is a very moving experience to turn over the pages of your "SOUTH AFRICAN ARCHITECTURAL RECORD". Firstly, because one is amazed to find something so vital emanating from a distant point in Africa which lies far beyond the equatorial forests; but yet more because one can discover so much of youth's faith in it, such solicitude for architecture, and so fervent a desire to attain a cosmic philosophy.

I believe we do not yet sufficiently realise that the whole world is in the melting-pot, and that a fundamentally new civilization is being born which nothing of the past can help us to express — so that everything must be wrought afresh in order to be indicative of the dawning of a new consciousness. Study of the past can be fruitful provided we abandon academic teaching and let our curiosity wander across time and space to those civilizations, grandiose as modest, which have expressed human sensibility in a pure form. Architecture must be torn away from the drawing-board to fill our hearts and heads — but above all our hearts as proof of our love for it. We must learn to love what is just and sensitive, resourceful and diverse. Reason is only a guide, nothing else.

How are we to enrich our creative powers? Not by subscribing to architectural reviews, but by undertaking voyages of discovery into the inexhaustible domain of Nature! "Beauty first!" is the true lesson of architecture. We find it in her adaptability, her precision, in the convincing reality of the spectacle of her harmonious combinations and creations which she offers us in everything: a serenity of perfection that exteriorizes its own inwardness. It is there in plants, animals, trees, in views of seas, plains or mountains — yes, even in the perfect harmony of natural catastrophes, geologic cataclysms, etc. . . Open your eyes, burst the strait-jacket of professional discussions! Devote yourselves so whole-heartedly to studying the meaning of things that architecture spontaneously becomes an inevitable consequence.

Break down the idea of "schools" ("Corbus's" own particular school no less than the "School of Vignola"). Have done with formulas, tricks of the trade, and slickness. We are on the threshold of discovering the architecture of the modern age. Let us have fresh proposals from every quarter of the globe. In a century's time we can begin to talk of "a style". To-day we dare not. All we can do is to think OF STYLE in itself — that is to say the moral probity of every work that is truly and genuinely creative.

I could wish that architects themselves, not merely architectural students, sometimes took up their pencils to draw a plant or a leaf — or to express the significance of a tree, the essential harmony of a shell, the stratification of the clouds, the ever-changing ebb and flow of waves at play upon the sands — and discover the successive phases of expression of the inner force informing all these things. May their hands (guided by their heads) wax enthusiastic for these intimate investigations!

I want architects to become the very elite of society — men with the richest (instead of the poorest, narrowest and most commonplace) intellects and an intelligence open to everything (instead of having an intelligence as hermetically sealed by professional specialism as that of grocers). Architecture is a habit of mind, not a profession.

I will look further into the future still. The architect must become the most sensitive and the best informed of art-lovers. He must be an even better judge of plastic and aesthetic values than of his own calculations. It is by virtue of its intellectual radiance, by its smile and by its grace, that architecture must bring the men of our new mechanical civilization, not just strict utility, but joy itself. Our task to-day is to light this flame — AND TO BANISH STUPIDITY!

Fraternally to all of you,

Letter addressed to a Group of Modern Architects in Johannesburg on the occasion of a manifesto published by them.

Figure 4.2. Top left: Cover of zero hour magazine (McIntosh et al, 1933; 1985). Top right: House Munro in Pretoria by McIntosh, completed in 1932 (McIntosh et al, 1933; 1985). Middle left: House Stern by Martienssen, Fassler and Cooke (Jonas 1937:106). Middle right: House Harris by Hanson, Thomas and Finkelstein in Houghton, Johannesburg, 1933 (Lipman, 1962:10). Bottom: Letter from Le Corbusier to the Transvaal Group in 1936 and published in *Oeuvre complete de 1919-1929*. (Le Corbusier and Jeanneret, 1943).

But the inherited orthodox Modern Movement influence on domestic architecture¹⁰⁸ soon faded, partly¹⁰⁹ due to the untimely death of Martienssen in 1942. Frampton (1992:254) notes that Hanson had already before this date begun to question the socio-economic validity of Le Corbusier's planning. After all, as Cooke argues (2003:52), the architecture inspiring the Transvaal Group was derived from an imported European culture. The fervour of a few men that had control over the only architectural publication of the time¹¹⁰, and their limited influence at Wits, would not be strong enough to persuade both patrons and the public to adopt the new imported 'style'. Chipkin alludes to this limited influence (1993:155) when he describes Herbert's revision of his original position (1967) on Martienssen's work as 'revolutionary'. Herbert later notes (in 1975) that the work had only had an aesthetic effect on architecture in South Africa. Cowin's critique (Chipkin, 1993:185) of the Transvaal Group's work as slavishly imitative of imported European ideas added fuel to the fire. Hanson's reminiscences of the 1930s (Cooke, 2003:52) also indicate that their work was biased towards aesthetics. But perhaps, in terms of a rational approach to function, the critics are overly harsh. Martienssen clearly outlines a functional design bias in the *zero hour* (sic) publication, when describing living and bedroom spaces in House Hanson as having purposefully been orientated to the north to give privacy from the street and gain solar access. But a problematic argument follows. Martienssen tries to justify the pure white cubic forms in a directly Corbusian manner. His travels to rural buildings in France, Italy and Sicily are well documented (Herbert, 1975:207), and his sketches allude to a plastic and grounded architecture (see Fig. 4.3). If only he had interpreted the vernacular traditions in more principled ways¹¹¹, as so many of his European contemporaries were to do¹¹², the untenable cubist forms of his houses¹¹³ may have undergone a metamorphosis not unlike Fagan's interpretations of the Cape tradition.

– ¹⁰⁸ The Modern Movement inheritances had a much greater influence on the commercial sector in South Africa, so much so that Pevsner remarked in the early 1950s (Architectural Review, June 1953) that there wasn't any other part of the Commonwealth which could offer the eye so consistent and convincing a vision of the style today, referring to it as a 'contemporary vernacular' of the Transvaal.

– ¹⁰⁹ Further reasons for the demise of orthodox Modern Movement influences in South Africa will be discussed later.

– ¹¹⁰ South African Architectural Record.

– ¹¹¹ Only one unbuilt example partly achieves this. An entry in the 1937 Ideal Homes Competition uses monopitch roofs similar to the examples Martienssen sketched on his overseas travels (see Herbert, 1975:208-209).

– ¹¹² Even Le Corbusier's vernacular interpretations would have been a better source of inspiration.

– ¹¹³ In fact, his own house began to take on a limited brick tradition – was this a move away from the restrictions of cubism?



Figure 4.3. Left: Le Corbusier sketch of house and garden in Catalonia 1928 (Curtis, 1987:239). Right: Martienssen sketch of rural architecture (Herbert, 1975:208).

In 1938, Le Corbusier's Mathes house was published in the March issue of the SAAR, four years after Martienssen's House Stern. It influenced the work of the Pretoria architect Hellmut Stauch greatly. Howie (1938:85) points towards a new architectural direction:

A house must be in harmony with its environment. It should retain the "caractere regional," which is itself determined by the particular conditions of living, customs, materials, and the essential dictates of the climate. Conversely it is not to be compounded of more or less exact copies, of more or less established forms which are deprived of all logical and aesthetic content: it should not conform to some universal formula on the pretext that technical developments have wiped out distances and frontiers. This is particularly true of the week-end-house, the "House Minimum," the inexpensive retreat which is becoming so well known in European countries. The House at Mathes, by Le Corbusier and Jeanneret, which, in its poised formality, its characteristic functionalism and in the intelligent and sensitive use of materials, wood and stone is an example of this harmonious relationship between the house and the limiting conditions of its environment (Howie, 1938:85).

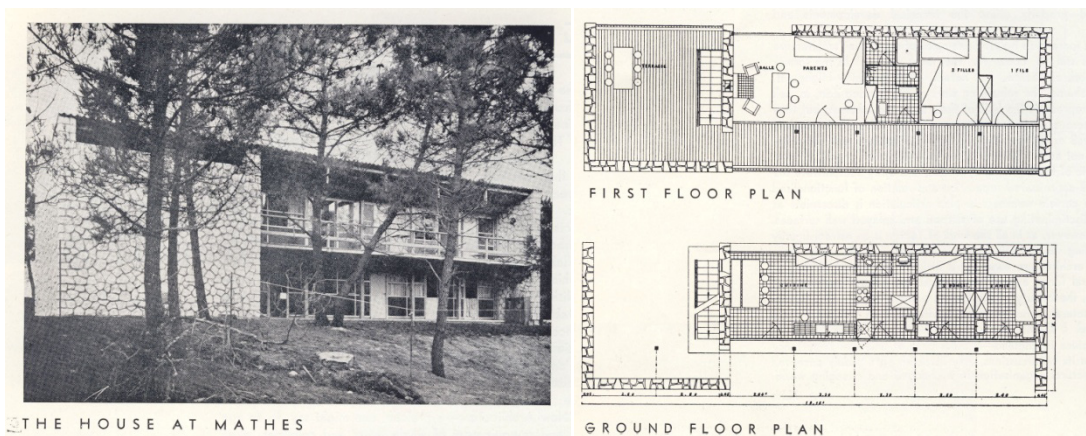


Figure 4.4. Left: Le Corbusier's Mathes house published in the March issue of the South African Architectural Record of 1938 (Howie, 1938:84).

Simultaneously though, other architectural debates continued in South Africa between the

remnants of a neo-Classical tradition and the beginnings of a regionalist expression brought on by the power struggle between the English colonialists and the Afrikaner¹¹⁴. It is this regionalist expression that was to mediate an inherited modernity.

This period saw the final eclipse of the Baker-Lutyens school by the flood of influence (more particularly from Europe) which was to crystallise into the modern movement, although a few stalwarts like Gordon Leith retained an affinity for the traditional. He demonstrated a master's skill in detailing and use of materials, and in a period of revolt against adornment in response to the compelling philosophy of the machine technology, he steadfastly pursued the practice of architecture as an art (Anon, 1965:40).

The Modern Movement search for appropriate forms led many architects to look at the architecture of the Mediterranean, as its formal and material simplicity exemplified the tenets of the modernist project and a non-facile traditionalism. Fagan's hero, Le Corbusier, was no exception and the formal dialectics in his work expressed as orthodox and organic were representative of his ability to design according to circumstances, using materials appropriate for the condition. It is important to understand these mediations in Le Corbusier's work, as Fagan was to adopt many of the same approaches.

4.3.3. Le Corbusier's mediations

Le Corbusier's architecture ... was strongly influenced by Mediterranean vernacular tradition (Pallasmaa, 1988; 2007:135).

Most references to the work of Le Corbusier stress his orthodox approach to architecture. But the rational expressions of buildings like Garches and Savoye were part of a search for new and appropriate form at the time. He did not forget the more emotional aspects of architecture or responses to place. In fact, his search for a new architecture had its foundations in the dialectic of classical and romantic architectures. It can be argued that he mediated many concerns in his architecture which resulted in the 'conflicting' geometric and biomorphic forms identified by Jencks (1985:142). Jencks (1985:153) indicates that Le Corbusier displayed 'secondary sensations' in his work, as an organic direction can be seen in his paintings as early as 1926. It can be argued that these tendencies were not secondary but were rather expressive of a search for truth in tradition.

Classicism and 'Mediterraneanism' were adopted by the cultural nationalists of the Suisse romande. This fact was extremely influential in forming the mature ideology of Le Corbusier, in whose work reference to the Mediterranean vernacular (cubic form, white walls etc.) was just as prominent as the idea of industrial

– ¹¹⁴The struggle was heightened by the establishment of the Union of South Africa in 1910.

standardisation (Colquhoun, 1999; 2007:13-14).

Other authors (Curtis, 1996:417, Frampton, 2001:133 and Tzonis, 2001:116) have recognised that the regionalist tendencies of Le Corbusier's work were not a new direction, but rather a patent respect for place, climate and materials and a search for the authentic in architecture. The trips abroad had sensitised him to aspects of place very early on in his career and Passanti (1997:438,439) notes that Le Corbusier's search was for a purity and a naturalness uncorrupted by the problems of the 19th century.

In learning from precedent, throughout his life, Le Corbusier was particularly interested in solutions of great elementarity, and sought these in vernacular or ancient settings like the Balkans or Pompeii, or in examples of functional minimalism like railway sleeping cars, ship cabins, and airplanes. An argument can be made that Le Corbusier owed this interest to Rousseau's ideas on the natural life: the more basic and paradigmatic, ancient or vernacular a solution is, the closer it gets to being "natural" and "original."

Colquhoun (1997; 2007:144) argues that the 1920s did not represent a triumph of rationalism but was in fact a mediation of historicist and romanticist conflicts that originated in the 18th century. Le Corbusier's fascination with the purity of Mediterranean architecture and Classical rationality, as well as his desire for new form, resulted in his work mediating between a series of polarities. His architecture was geometric and organic while, at times, vernacular building techniques were combined with engineered components. Frampton (2001:131) notes the first use of a tectonic polarity in Maison Loucheur in 1929 and later in Mandrot (see Fig. 4.5). Le Corbusier believed that traditions could be reconciled with technological progress.

Architecture is the result of the state of mind of its time. We are facing an event in contemporary thought; an international event, which we didn't realise ten years ago; the techniques, the problems raised, like the scientific means to solve them, are universal. Nevertheless, there will be no confusion of regions; for climatic, geographic, topographic conditions, the currents of race and thousands of things today still unknown, will always guide solutions towards forms conditioned by them (Colquhoun, 1997; 2007:144).

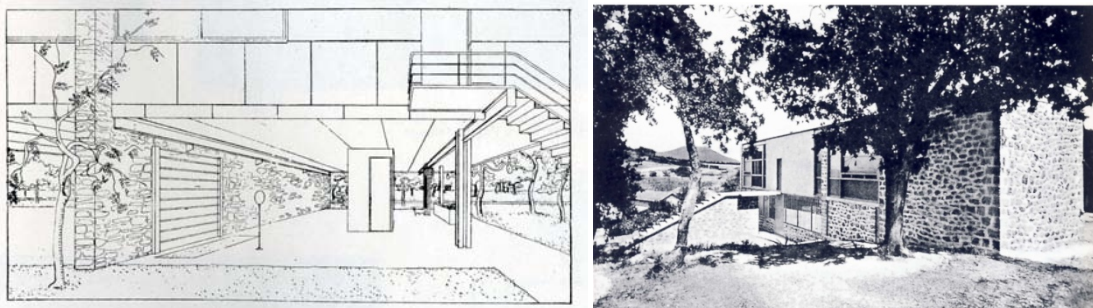


Figure 4.5. Left: View of Maison Loucheur (1929) showing the tectonic play of organic stone wall and engineered facade (Le Corbusier & Jeanneret, 1943:197). **Right:** House for Madame de Mandrot, near Toulon, 1931. Construction is of load bearing rubble stone throughout with timber framed openings (Frampton, 2001:134).

Le Corbusier used both platonic and tectonic forms and on the whole his work alternated between idealist and realist forms and pastoral and counter pastoral modernities. Fagan notes that as students they were shocked at Le Corbusier's organic design of La Chapelle de Notre-dame-du-haut" at Ronchamp. But Fagan must have unconsciously absorbed the master's earlier mediative strategies as they are very evident in his architecture. Their common affinities for the simple qualities and pure form of Mediterranean architecture (in Fagan's case through the Portuguese influence on the Dutch) had fostered a similarity of approach. Although Martienssen too had investigated Mediterranean and Cape examples he chose to follow the master's idealist aesthetic rather than develop his own.

It is telling, perhaps, that Fagan was inspired¹¹⁵ by the regionalist leanings of Le Corbusier's proposed house in Chile, Errazuris (1930) (See Fig. 4.6), which Frampton (2001:133) notes saw Le Corbusier's first employment of a pitched roof since La Chaux-de-Fonds¹¹⁶. Even Hitchcock (1948:8), who espoused the International Style in the MOMA publication¹¹⁷ of the same name, rather apologetically notes that Le Corbusier had already used 'characteristics of the new Cottage Style' in House Errazuris. The house was to be constructed of random rubble stone walling and an exposed timber roof structure but as Le Corbusier himself notes (Frampton, 2001:133), "the rusticity of the materials is in no way a hindrance to the expression of a clear plan and a modern aesthetic".

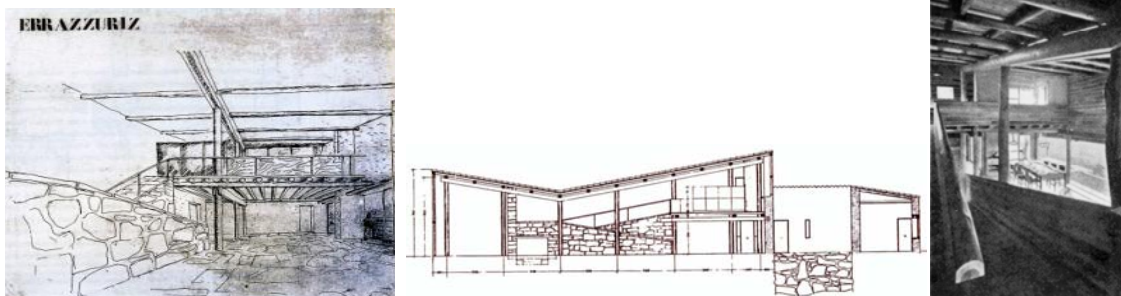


Figure 4.6. **Left:** Le Corbusier and Jeanerret: Maison Errazuris, Chile, 1930: interior (Frampton, 2001:133). **Middle:** Section through Maison Errazuris (Frampton, 2001:133). **Right:** Interior of House Errazuris (Joedicke, 1969:16).

This was an honest articulation of Modern Movement concerns. To use vernacular materials did not mean a return to the facile use of tradition. As Canizaro (2007:22) notes, the polarities of tradition and modernity are directly linked to ideas of progress and cultural continuity. Le Corbusier had already mediated these seemingly irreconcilable conditions and this approach

– ¹¹⁵ Fagan was inspired by the circulation system and material use in his first house (for his parents), House Keurbos of 1951.

– ¹¹⁶ Frampton notes (2001:133) that Le Corbusier had falsely suggested in 1934 that Errazuris had already been built. Joedicke however (1969:16) shows a photograph of the project under construction that is dated 1930.

– ¹¹⁷ Hitchcock and Johnson (1932:13) define the aesthetics of an International Style as 'emphasis on volume, regularity as opposed to symmetry and avoidance of applied decoration', all informed by a functionalist process.

directed much of the architecture of the third Modern Movement.

4.3.4. The third Modern Movement (the local and the global)

It was not until the 1940s and 1950s that modern forms had any appreciable impact on the 'less developed' countries, and these forms were usually lacking in the poetry and depth of meaning of the masterworks of the modern movement (Curtis, 1996:567).

The Second World War was followed by a period of physical, social and economic reconstruction. Modernity had shifted from a programmatic bias to a transitory one with, more often than not, counter-pastoral tendencies. The CIAM meeting of 1947 resulted in a reconsideration of its original orthodox position, arguing for an architecture that would meet the material and emotional needs of society (Prinsloo, 2000:96). The idealist phase of the Modern Movement was over and as Ghirado (1996:10) and Curtis (1996:395) argue, universal prototypes began to be misapplied while revolution was replaced with capitalism.

In Europe this tendency had already reared its head in the 1930s, with the transmigration of work of architects like Aalto. But the major shift occurred in work outside Europe, particularly in developing countries in South America and Africa. These regions were exposed to Modern Movement tendencies through the European education of their architects, the relocation of architects, extended trade, and the dissemination of publications such as those of the Museum of Modern Art¹¹⁸. International Style architecture was easily adopted by countries that saw it as a way of creating a new tradition that severed the connection with colonial powers, or even as a reaction against restrictive regional tendencies (Curtis, 1996:396).

This was none more so than in South Africa where a limited orthodox Modern Movement influence had waned during the Second World War. Herbert indicates (1975:28) that the affection for the English house was still important in the Wits School during the early 1940s. Counter-classical trends and the beginnings of a nationalist fervour looked elsewhere for inspiration, and a modern-regionalism slowly developed.

As the Second World War arrived, building, especially house building, was cut down to a minimum. Eventually, America having emerged as a world power, began to exert an influence on architecture here. When in the early 1950's South Africa could once more afford to build homes and found, contrary to the flat white surface of the previous era, an abundance of materials. The International Style ignored its materials of brick, concrete and steel, refusing to express these in the search for pure form. The reaction to this was not merely a more honest expression of

– ¹¹⁸ For example 'The International Style' by Russell and Hitchcock in 1932.

materials present but a conglomerate of different materials vieing (sic) for effect. Unplastered brickwork; timber on floors, walls and ceilings externally and internally; stonework as walling or as covering on floors and verandahs, were ever present. Rubble walling was called by I. M. Pevsner, the British historian of architecture, 'a menace to domestic relaxation in the Transvaal' (Anon, 1965:7).

4.3.5. The development of the third Modern Movement in South Africa

In the decade after the war¹¹⁹, the new generation of architects, now freed from the compulsions and fuddy-duddiness of Gerard Moerdijk and his contemporaries, turned, not to the dominant Corbusierism of the Wits School or its subsequent angst-ridden debates, but to a new source of nation-building, partly state-promoted modernity of the architecture of post-war Brazil (Chipkin, 1993:279).

In 1942, the year of Martienssen's death, Roy Kantorowich¹²⁰ (1916-?) published a stinging critique of the urban ideas of Wright and Le Corbusier, condemning their authoritarian approaches. Evidently the debate raged on in the SAAR for months thereafter (Cooke, 1998:232). A formalized critique was launched in the form of an Art of Architecture exhibition held in September 1947 at Wits. The catalogue lists an interesting array and order of organizers. Supporters of orthodox modernism found themselves amidst a growing 'regional' clique – Cowin, Fassler, Furner, Hanson, Hendrikz, Herbert, Howie, Irvine-Smith, Kantorowich, prof. Adriaan Meiring, Moore, prof. Geoffrey Pearse, Porter, Stewart and the students of architecture and Fine Art at Wits. Douglass Cowin (1911-?) had as early as 1936 designed a seminal synthesis of Wrightian roof and Miesian plan in his Casa Bedo in Waverley (see Fig. 4.7), Johannesburg. This regional expression paved the way for a more acceptable domestic architecture. Fassler (1956:178) noted a great change in Hanson's earlier position, while the inclusion of the head of the Pretoria School, prof. Meiring, hinted at the change in architecture that had already begun at the newly formed school.

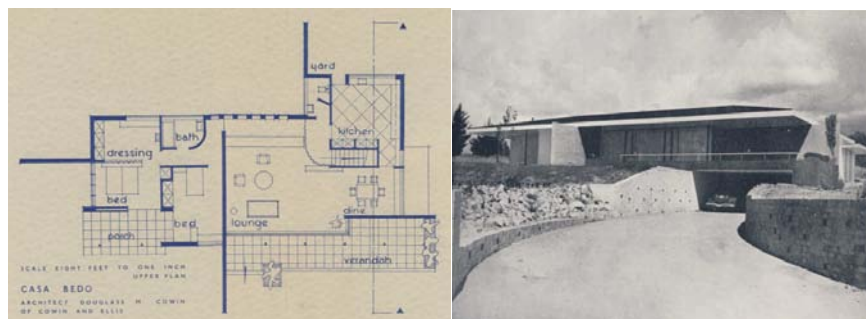


Figure 4.7. Left: Plan of Casa Bedo by Douglass Cowin, 1936 (Anon, 1938: insert). Right: Entrance view of Casa Bedo (Anon, 1938:428).

– ¹¹⁹ the Second World War.

– ¹²⁰ See Appendix J.

The exhibition call for a Vitruvian triad of utility, strength and beauty has been misconstrued by Cooke (1998:232) and Prinsloo (2000:97) as a negation of Modern Movement principles. The catalogue (see Fig. 4.8) clearly outlines two major Modern Movement themes that were still important, namely efficiency and honesty of expression in use. These reinforced a 'causerie' cited earlier by Furner (1892-1971) in the June 1926 issue of the SAAR, where two architects discuss the possibilities for a South Africa architecture:

The one is a protagonist of the continuance of the Cape Dutch tradition, who, recognizing the absurdity of building like England or France in a new, hot-climate land, sees the work at the Cape as the only traditional indigenous source from which to derive a South African architecture. His opponent points out the futility of trying to adapt the architecture of "a hundred or so odd farmhouses built under a Dutch government" a thousand miles from the Witwatersrand to the realities of the new world of concrete and steel; let us not vainly seek a colonial solution, he pleads, but turn once more to Europe, as McKim, Meade and White had done in America. The arguments of both sides, curiously compounded of sense and nonsequiturs, is resolved by the intervention of a student, "I still think you are both quite wrong", said the student, "and I am sure that the only way in which a real style is evolved is by unconscious effort. A clear logical attempt to solve local problems will in the course of years result in a real South African tradition and not a forced and consequently deformed style ... it is only in the logical solution of your own programme in the light of past experience that you can find hope for the future" (Herbert, 1975:22).

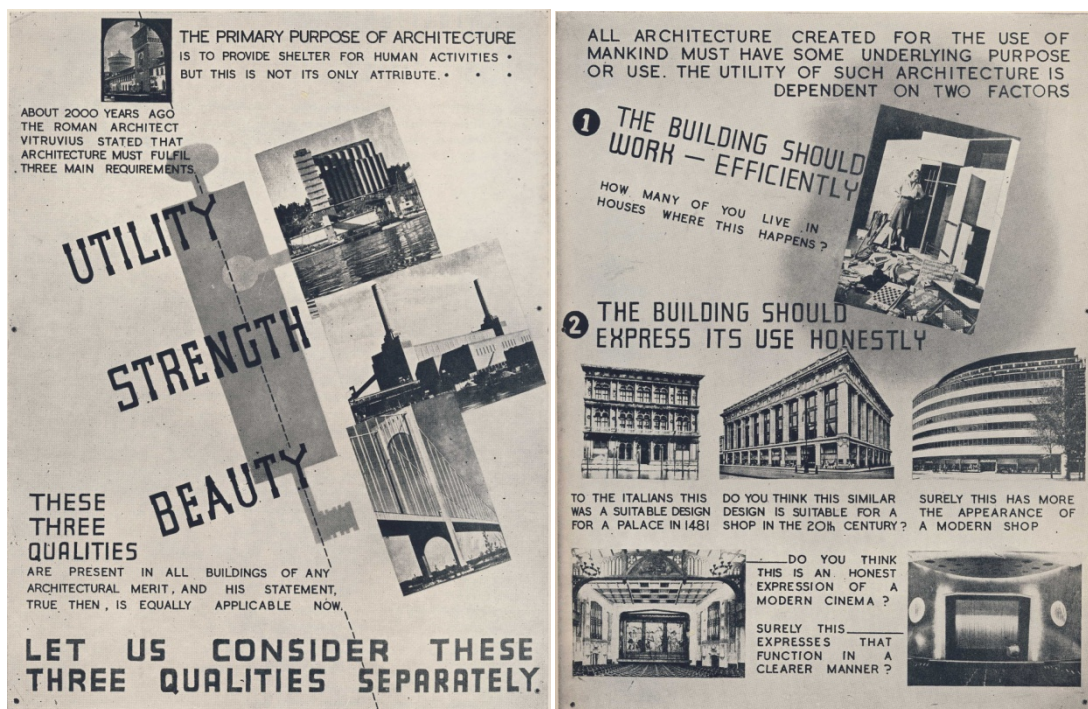


Figure 4.8. Left: Two pages from the 1947 Wits exhibition catalogue showing (on the left) the three essential Vitruvian qualities necessary in architecture and (on the right) Modern Movement influences (Anon, 1948:104-105).

A further, closer reading of the catalogue highlights a dichotomy of architectural directions. Images of Renaissance palazzos and neoclassical shop fronts are criticized for their inappropriateness, but at the same time twee examples of decoration are shown and argued for. Contemporary buildings are shown in natural surroundings as the heading shouts 'buildings can be contrasted with nature'. The search for an appropriate 'South African' architecture was still a burning and unresolved question. The classical references probably had as much to do with a hankering for an architecture of association as it did with those buildings still being constructed in that idiom. Although Cooke notes (1998:232) that the medical building by Hanson and the second Fassler dental school (both at Wits) had reverted to a stripped down classicism, other architectural directions began to mediate (and not negate) the vagaries of the Modern Movement through a recognition of place and materials. This has been referred to variously as a 'contemporary vernacular' of the Transvaal (Fassler, 1956:177), 'Transvaal vernacular' (Fassler, 1957:22), 'vernacular traditionalism' (Cooke, 2003:24) and a 'Third Vernacular' (Fisher, 1998:123).

A number of factors led to the development of a regional Modern Movement in South Africa and in particular in the Transvaal. Fagan would later respond to this trend as a student of architecture at Pretoria, while working for Volkskas and later in Cape Town, where he developed his own reflective modernism.

4.3.5.1 Truth and deceit (the search for honesty in architecture)

In 1937, Cowin¹²¹ designed his own house, Casa Bedo, in the suburbs of Johannesburg (see Fig. 4.7). It tempered the orthodox aesthetic of the Transvaal Group houses by merging modern requirements with aspects of place through climatic and technological responses.

Not that the Casa indulges in sentimental copying of familiar earlier forms, nor does it decorate its surfaces; but it uses its site more sympathetically, adjusts to the climate less uncompromisingly, and presents its basic geometric form less brashly (Lipman, 1962:14).

Unlike his orthodox counterparts whose architectural expression was too closely aligned with that of Le Corbusier (Herbert, 1975:233), Cowin created his own unique aesthetic, reinterpreting industrial techniques and 'softening' their application. The abstract forms of his contemporaries also began to be softened by wall texture, extended eaves, low sloping roofs and pergolas (Cooke, 2003:27).

Farther north, material use and climatic response were to become the hallmarks of a

– ¹²¹ Cowin's winning design for the 1934 Ideal Home competition is starkly imitative of Le Corbusier's work. In only three years he had completely revised his position.

developing regional-modernism in Pretoria. Duncan Howie¹²² (1945:42) notes the development of a 'contemporary indigenous architecture' but hastens to add that, with the limited material palette available, little aesthetic change was likely to happen.

This contextual response was not only a development of Johannesburg trends but one that had developed at least twenty years earlier through the work of architects like Gerhard Moerdijk¹²³ (1890-1958) and artists like Jacobus Hendrik Pierneef¹²⁴ (1886-1957).

Pierneef also contributed to "Die Boerevrou", one of the earliest periodicals in Afrikaans, where he expressed these sentiments and urged a "true" house in which the Transvaal climate and environment were accounted for. In the same year, 1920, the young Gerard Moerdyk, who had just started his own practice, also contributed the first of many articles to "Die Boerevrou", advocating the use of simple materials that might be readily available on a farm, such as thatching grass rather than imported corrugated iron (Fagan, 1991a:5).

Shortages of imported materials during the war and limited sophisticated technologies required architects to become inventive:

Local materials weren't subject to the Building Control of the time and were freely available. Woodblock was restricted to only a few square metres per house, for example, so slasto or brick became the flooring of choice (Nation, 2003:2).

The architectural results were innovative and contextually appropriate. Their direct association with place through material usage and climatic response created an honest and pragmatic response to the requirements of the time. As Tzonis (2007:216) remarks, the architects of this time were focussed on "advancing efficiency of construction and enhancing comfort".

4.3.5.2 Colonialism and Nationalism

On 31 May 1910, the Union of South Africa was formed out of two former Afrikaner republics and two British colonies (Muller, 1984:385). The new government was soon seated in the Renaissance inspired Union Buildings designed by Herbert Baker. The building stamped its colonialist impression on the hills above Pretoria in an Acropolean manner, but the imported Free State stone provided a strange, yet welcome, regional mediation. Although Afrikaans became the official language of the Union in 1925 (Fisher, 2006:128), the Afrikaner was still culturally and economically dominated.

As one historian of Afrikaner nationalism, Dan O'Meara, writes: '... the structure of

– ¹²² See Appendix J.

– ¹²³ See Appendix J.

– ¹²⁴ See Appendix J.

the South African economy offered few opportunities to those whose home language was Afrikaans. The economy was dominated by "imperialist" interests.' The fear among Afrikaner thinkers, in the context of the Fusion government's attempts to encourage a broader South Africanism based on cooperation between English-speakers and Afrikaners, was that the latter would eventually be enslaved' (Silverman, 1999:3).

A major exponent of Afrikaner Nationalism and the rejection of colonialist architectural styles was Gerard Moerdijk. Although he acknowledged the Baker influence, he defined the style of the Union Buildings as inauthentic for the South African condition, quoting Pierneef's opinion (in his contributions to *Die Boerevrou*¹²⁵) that the buildings represented 'die boustyl van die vyand', i.e. the building style of the enemy (Chipkin, 1993:132). Moerdijk postulated an architecture of self-sufficiency that would limit the necessity for expensive imports. The influence of contributions of Moerdijk and Pierneef on Leith through *Die Boerevrou* fostered Leith's investigations into local building materials and practices (Chipkin, 1993:132). The search for a non-colonialist architecture would even call for a rejection of Cape Dutch architecture¹²⁶ and the advent of an Art Deco influence at the height of Nationalist expression in the Voortrekker Monument of 1930 (see Fig. 4.9). Later, Norman Eaton would foster a non-stylistic approach in his search for an authentic South African architecture and his simple use of materials and forms much inspired by Leith (see Fig. 4.9).



Figure 4.9. **Left:** Moerdijk's Voortrekker Monument of 1938: arrival and entry point (Author, 2009). **Second from left:** Eatons' Anderssen House, The-Willows, Pretoria, 1949-50 (Harrop-Allin, 1975:80). **Second from right:** Eaton's Anderssen House, Pretoria North, 1939 (Author, 2008). **Right:** Leith's Houghton house completed in stone sourced from the site (Anon, 1952c:275).

4.3.5.3 Style and the public: fashion or fission?

These [modern architectural] ideas were so revolutionary that this style was conceived as an obvious contrast to housing at any previous stage of civilisation. From first to last every element was emphasised as the antithesis of what had

– ¹²⁵ Le Roux and Fisher's book "Die Afrikaanse woning" of 1989 contains detailed reprints from editions of *Die Boerevrou* which appeared between 1919 and 1931.

– ¹²⁶ It was a rejection of its debased use as a style and aesthetic rather than the appropriateness and simplicity revered by architects such as Eaton.

been before, from the materials of concrete, steel and glass through the purely geometric shapes, pierced carefully by balconies or windows, right down to the machine made furniture of tubular metal. In achieving this, the International Style house was too austere for the public (Anon,1965: 6).

The purism of Modern Movement architecture advocated by the Transvaal Group struggled to find favour with the general public. The 1937 launch of a national Ideal Homes Competition attempted to popularise the International Style home in South Africa. The competition was organized by the Argus Printing and Publishing Company and there were three price categories of £950, £1700 and £2500. Competitors voted in one of three regions (Natal, Transvaal-Orange Free State and the Cape). Six of the nine winning designs were from two Johannesburg architects and quite a number of the South African *Avant-Garde* entered (Herbert, 1975:161). The vast majority of the entries were explorations of the Modern Movement and there were several pitched roof designs, but an anomalous piece stands out. An entry by Martienssen, Fassler (1910-1971) and Howie (see Fig. 4.10) expresses a bi-nuclear plan and a set of monopitch roofs in the flavour of Stauch. The house was innovative in its economy and simplicity and Herbert (1975:164) notes that this was Martienssen's only exploration of this form type.

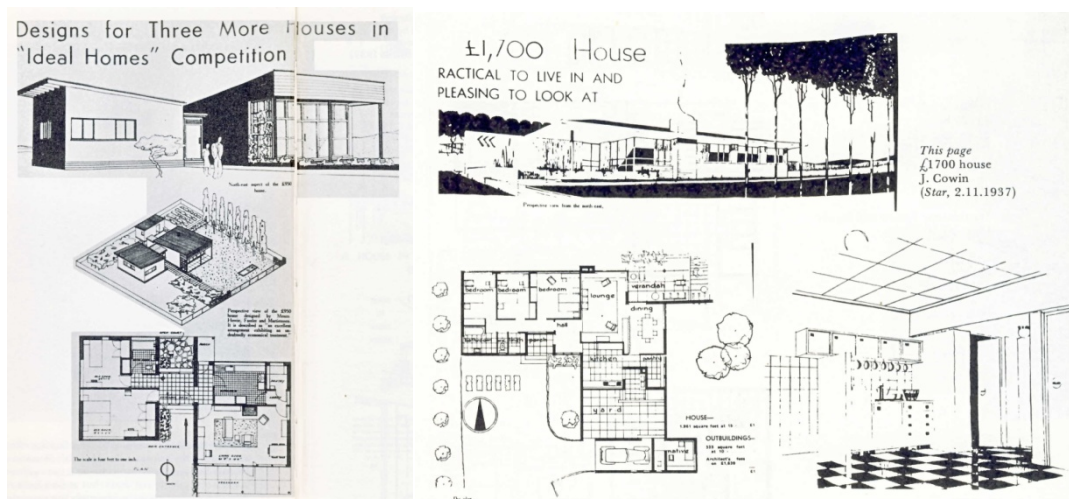


Figure 4.10. Left: Martienssen, Fassler and Howie's £950 entry to the Argus Ideal Homes Competition of 1937 (Herbert, 1975:160). Right: Cowin's £1700 entry (Herbert, 1975:162).

The reports that were published in the newspaper thereafter suggest the outcome of the competition was a move away from purist architecture. The Star notes that the South African house was slowly developing as a 'low light building with dark flat pitched roof, large unobstructed windows sheltered by the deep eaves ... this growing naturally out of its surroundings, may well be the South African style of the future, as the gracious Cape Dutch was that of the past' (Herbert, 1975:165). It was a perfect description of Cowin's entry (published on 2 November 1937), while it also exemplified the qualities of his own house built just a year before. In 1938, Jonas (Herbert, 1975:228) bemoaned the pseudo-modern work on the Rand, and later Fassler (1956:177) would note that technical problems following attempts to emulate

Le Corbusier's work had resulted in 'public hostility'. Connell (1945:164) explains that the austerity of contemporary architecture had fostered a disconnectedness from the public, shocking an audience only used to the picturesque or no style at all.

First, the clear-cut prismatic forms of the earlier examples came to be overlaid in later work by a fondness for plastic experimentation of an undisciplined kind. Looking through the 'Review' and through back numbers of the 'South African Architectural Record', one becomes rather painfully aware of this tendency. Not only is form frequently piled upon form in an apparently haphazard and certainly cacophonous way, but in the process such values as good massing, composition and surface organisation are sacrificed, till one comes to the rather plaintive conclusion that in throwing off the shackles of the past, the architects have somehow succeeded in unlearning some of the older lessons of architectural design. It is the writer's opinion that over-complication of this type, the rejection of the simple statement in favour of one that is turgid, over-rich and frankly ill-at-ease, is a factor which has tended to militate against the acceptance of contemporary architecture by public and public authorities (Connell, 1945:164).

Martienssen's contemporaries also recognised that the tide was turning against them. They wrote to him while he was in Europe explaining that the "reaction against modern architecture seems to [be] becoming more and more pronounced each day ... Norman Hanson seems terribly depressed these days, he holds the view that the movement is finished" (Herbert, 1975:230). In 1939 Martienssen expressed the same sentiment in a letter to Le Corbusier in which he notes that "in the face of vulgarisation the movement has difficulty in making headway in this country". He also set his students a project in 1941 to argue the positive aspects of the Modern Movement. But the tide had finally turned and Martienssen's death the next year sealed its fate.

Public opposition to the new architecture was almost always intensely hostile, and there is no doubt that opportunities were lost or turned down by the architects themselves, because they were unwilling to abandon or compromise with their ideals, even in the face of violent opposition (Cooke, 1960:21).

4.3.5.4 Formality and practicality

The new architecture which had a mechanistic or machine-like quality, demanded for its expression smooth surfaces with exactness of contour and definition – a sort of solid geometry of form. This necessitated a degree of precision in construction of which the building industry here was not really capable at that time (Cooke, 1960:21).

In their haste to foster an international style aesthetic and work within the limitations of available technology, the Transvaal Group often resorted to low-pitched corrugated-steel

sheeted roofs behind parapet walls. These constructions could not withstand the 'rigours of the Transvaal climate' (Howie, 1945:141 and Connell, 1945:164) and leaked badly, causing problems at parapet junctions (Chipkin, 1993:166). But roofs were not the only problem. The regional protagonist Cowin "did not mince words: 'Huge sheets of glass are all very well in Germany but they are not suitable in this country'" (Chipkin, 1993:186).¹²⁷

It was unfortunate that "the newly emerging architecture, having no sooner won its freedom from old restraints, immediately became subject to the discipline of a dogma more rigid than before" (Cooke, 1960:21). Connell (1945:164) lamented the fact that only twelve years after the first 'modern' construction, leaks at eills, jambs and flat concrete slabs caused surfaces to fail, giving buildings a worn out appearance. The aesthetic goals of the Transvaal Group could not be met by available technologies in the harshness of the local climate. Herbert (1975:234) describes the building industry in South Africa as archaic, as there was little mechanization on site, very few building components were being produced by industry, and the small labour force was biased towards a craft building approach. There was a serious incongruity between the technical needs of the new movement and what could be supplied. This issue prompted a move towards an architecture that synthesised the use of simpler and more widely available materials and technologies with modern needs.

Howie, both a lecturer and practitioner, gave a clear description of the type of roof that should be employed in the Transvaal climate in a 1958 conference entitled "The technical aspects of architecture in South Africa". Here he notes (1958:26) that the limited span, low-pitched roof with overhangs was the cheapest and most effective of the 'permanent' roof types giving protection to the walls below. The demise of the flat roof was also corroborated by Lipman (1962:14) who suggested that pitched roof overhangs provided other advantages such as the "psychological tying of the house to the ground" and climatic control. At the University of Pretoria students were beginning to

... draw diagrams analysing sun-angles for the north facade. [Architects] favoured local materials: stone from the koppies and bricks for walls and floors (Nation, 2003:2).

– ¹²⁷ Cowin had initially extolled the possibilities of the flat concrete roof in the 1934 publication titled "Architecture in South Africa" (Cumming-George, 1934:101).

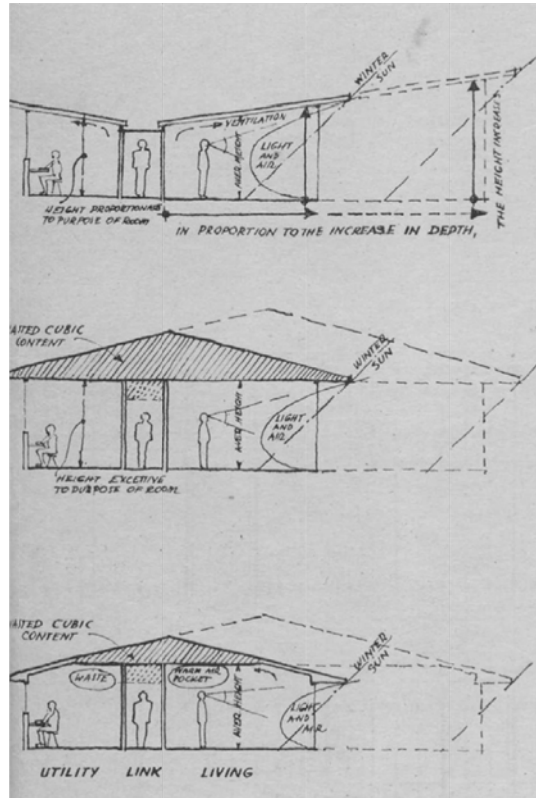


Figure 4.11. Left: Hellmut Stauch's series of sections showing sun angles for optimum winter penetration (Stauch, 1945:207).

These pragmatic approaches of the Pretoria architects soon fostered a regional style that did not negate the advantages of Modern Movement planning, but from which forms that were suitable both aesthetically and practically could be derived.

4.3.5.5 Alliance and deference (revolution and evolution (Du Toit, 1983:49))

The death of Martienssen in 1942 marked the demise of the Transvaal Group's limited influence on domestic architecture. As early as 1937, fissures had already appeared in the group when Martienssen reluctantly turned down an offer from CIAM to establish a South African arm. Herbert (1975:187) alludes to personal discord resulting in Martienssen not convening a meeting of the group that would have consisted of McIntosh, Hanson, Stewart, Cooke, Fassler, Howie, Sinclair, Coaton, Kantorowich, Jonas and Bryer, and students South, Birch, Wilson, Wepener and Connell.

Cooke (1993:23) suggests that Hanson, McIntosh and Fassler together with Kantorowich formed a new alliance that questioned earlier propositions about the Modern Movement. These revolved around the limitations of the building industry to deal with technological advancements as well as the restrictions of their aesthetic bias (Herbert, 1975:233). Later, in his appraisal of architects that looked rationally at local conditions and designed from first principles, Fassler

(1956:178) included Hanson and McIntosh with the addition of Eaton and Cole Bowen¹²⁸ (1915-1952). Eaton had fortunately completed his education at Wits before the influence of the International Style took hold (Haarhof, 1975:12) and was more influenced by the Arts and Crafts direction of his mentor Leith. Cole Bowen's rational interpretations merged with a sensitivity for locally sourced materials such as brick and slate.

An earlier deference to this change in approach can be seen in the 1936 McIntosh house, where an on-site decision to leave walls unplastered¹²⁹ fostered an innovation that was to have a long lasting influence (Herbert, 1975:149). Important, too, was Hanson's significant recognition (1938:149) of the dichotomies that the architect had to resolve – those of economics and technicality and a contribution to international architectural debate. This possibly marked the beginning of a move away from a limited aesthetic interpretation of the Modern Movement, and a move towards a regional expression that also rejected a facile traditionalism. Kantorowich's critique of the direction of the Transvaal Group has already been highlighted, but Fassler (1956:179) states more emphatically that he no longer supported the International Style. Cooke (2003:26) notes that Fassler's later buildings used forms from vernacular traditions which had much in common with Swedish National Romanticism. Fassler had, in his pre-war Plover House (1935), already done away with geometric abstraction (Cooke, 1993:27), while Cowin's initial exclusion from the 'mainstream' approach of the Transvaal Group had fostered an even greater steadfastness to succeed. His work provided an alternative to the aesthetic interpretations of the Modern Movement. Strangely enough, he made a speedy turnaround from his Le Corbusier inspired (and executed) winning entry for the Rand Daily Mail sponsored Ideal Homes Competition in 1934 (see Fig. 4.12). This eclectic piece awkwardly combines elements of Loos and Le Corbusier under the pretexts of 'beauty' and 'comfort'.

Beauty is found, by the modern architect, not in ornament but in the proper handling of the masses, proportion, form and colour. Comfort is found in intelligent planning and in the adoption of devices to save labour (Cowin, 1934:255).

– ¹²⁸ See Appendix J.

– ¹²⁹ Prinsloo (2000:94) describes the house as a 'rustic interpretation of the "white houses" of the Transvaal Group.

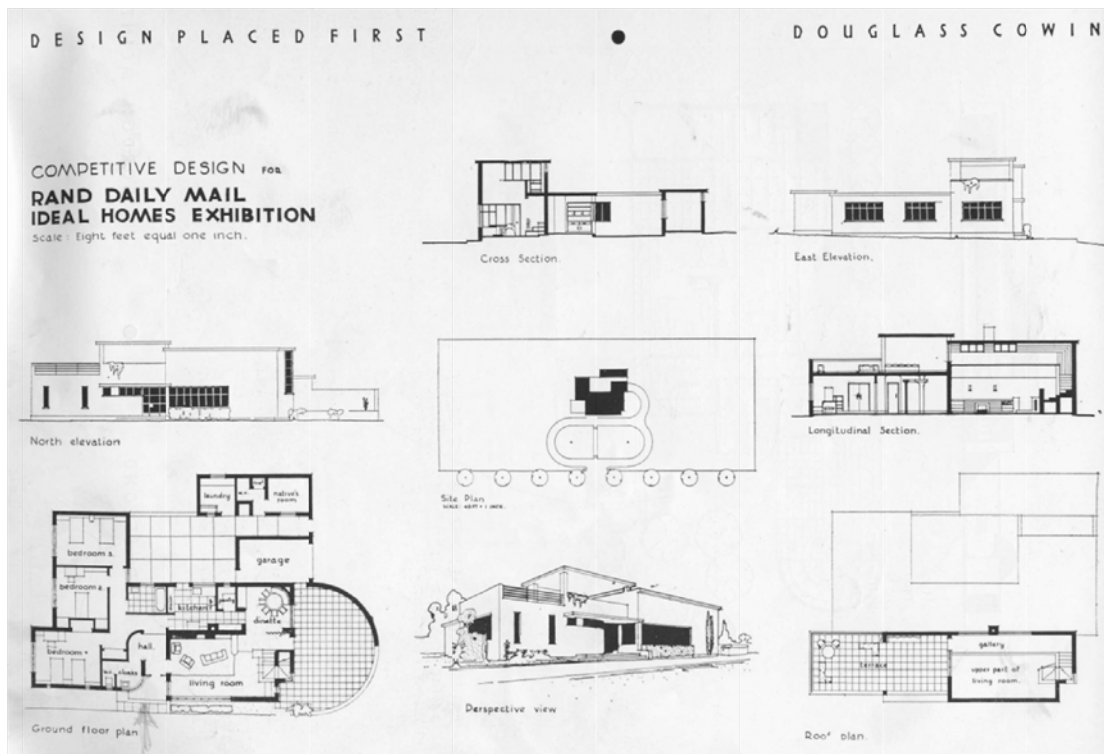


Figure 4.12. Left: Cowin's winning entry to the Rand Daily Mail Ideal Homes Competition of 1934 (Cowin, 1934:257).

Cowin extols the advantages of the flat roof on planning, while in the same breath criticizing the limitations of the pitched roof. Three years later he would mediate the restrictions of this roof form and freedom in planning.

4.3.5.6 The Transvaal and the Cape (simplicity and appropriateness)

Fisher (1998:123) argues for the emergence of a Third Vernacular in Pretoria during the 1940s and 1950s, as a response to local circumstances and an economy of means required by material shortages. The approach emulated an avant-garde search for simplicity and a return to basics not dissimilar from the reverence shown by many South African architects for the Cape-Dutch tradition. In 1932, Moerdijk (the arch Afrikaner nationalist) argued in a newspaper article for the development of a truly South African architecture by referring to

... the Cape Dutch style as 'n suiwere Afrikaanse produk' [a pure Afrikaans¹³⁰ product] and blam[ing] British colonialism for its demise.' The following year he wrote: 'Die Kaaps-Hollandse boustyl is op dieselfde manier 'n Afrikaanse produk as die Afrikaanse taal, die Afrikaner bees en per slot van rekening, die Afrikaner self.' ['The Cape Dutch style is an Afrikaans product in the same way as the Afrikaans language, the Afrikaner cow and, in the end, the Afrikaner himself.'] (Silverman, 1999:130-131).

— ¹³⁰ He was perhaps referring to an 'African' sensibility.

In a post-war rhetoric, Connell (1945:162) extols the virtues of the Cape Dutch tradition and its “discipline, beauty and good manners”. He argues that students of architecture must become directly acquainted with the buildings by taking photographs, making sketches and through physical measurement, adding that a thorough understanding of this architecture will have a simultaneous effect on orderliness and beauty. Baker, Leith and Eaton (Fisher, 1998:127) also revered the simplicity, honesty and stature of Cape Dutch architecture. Here Eaton highlights its salient features:

To an amazing degree the best of 18th century and early 19th century Cape Dutch architecture can, in my opinion, be compared to the great architectural achievements of all time, because these achievements do not ultimately depend upon size as such, or upon lavishness of embellishment or other such superficialities, but upon simple honest thought. Because this wholeness of mind is more than usually difficult to achieve in the complicated, chaotic, experimental times we live in today, we cannot afford to lose sight of it (Harrop-Allin, 1975:65).

Eaton had first-hand experience of this architecture as a child on his mother's farm in the Cape, and later when assisting prof. Geoffrey Pearse with his book *Eighteenth Century Architecture in South Africa* (Harrop-Allin, 1975:19-22). An added impetus was his restoration work in many small Cape villages. Barrie Biermann was instrumental in persuading Fagan to document many of these towns, which resulted in Fagan's *Brakdak* publication of 2008. Prof. Adriaan Meiring¹³¹ and Basil South¹³² embarked on a study tour to the Cape with a group of students¹³³ (including Fagan), where they captured the architecture through drawings and on film for a departmental photographic competition. Cole Bowen's 1957 publication *Essays in half tone* also demonstrated an affinity for the Cape tradition. All of these architects taught at the University of Pretoria and it can be argued that their understanding of the simplicity and appropriateness of Cape architecture was passed on to a new generation of architects that Fagan was part of.

– ¹³¹ See Appendix J.

– ¹³² See Appendix J.

– ¹³³ Pearse had earlier taken a group of students, including Martienssen, to the Cape in 1928.

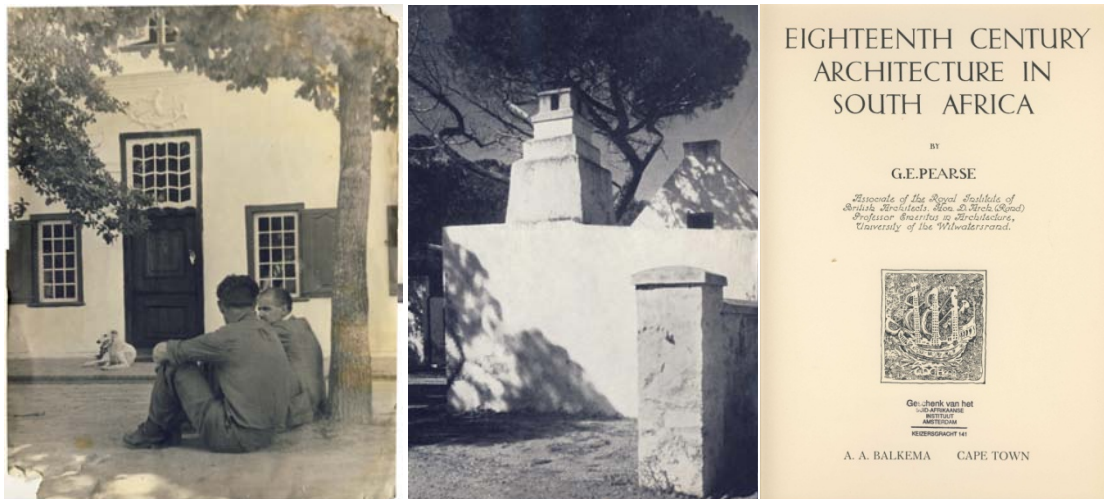


Figure 4.13. Left: Pretoria university lecturer Basil South and head of school Prof A.L. Meiring at Ida's Valley in the Cape during their visit with the students around 1945 (Fagan archive, undated). Middle: Image from "Essays in Half-Tone" by Cole Bowen (1957). Right: Inside cover of Pearse's Eighteenth Century Architecture in South Africa (Pearse, 1968).

4.3.5.7 Practicality and economy

As early as 1920 the young Gerard Moerdijk advocated the use of simple materials such as those that may be found on a farm, in his contributions to *Die Boerevrou* [*The Farmer's Wife*] (Fagan, 1991a:5). The effects of the Second World War fostered a necessity for this type of approach.

The economy of South Africa changed little during the first two years of the war but from 1942 the effects of the war began to be felt. Especially remarkable in the economy of South Africa was that money was plentiful but that commodities and foodstuffs were scarce ... The shortage in commodities was owing to the preference given to the production of war materials as well as the limiting of imports ... During the first half of 1942 various commodities such as petrol, rubber, paper, motor vehicles, building material, textiles, agricultural implements and wood were declared to be controlled goods (Muller, 1984:447-448).

The years during and after the Second World War were characterized by severe shortages. Nation (2008:1) explains that there were shortages of everything from petrol to petticoats and a particular lack of steel products, while Building Control governed the allocation of materials and demolitions were forbidden. These restrictions, together with the limitations of construction technologies, forced architects to improvise, to be inventive with very little and to design spaces that maximised potential with minimal means. There were few local industrialised products such as doors and windows. McIntosh (1956:23) wrote that he had to fashion doors out of Oregon pine strips while the lack of wealth in Pretoria prohibited large scale imports of glass.

We all tried our flat roofs, we tried concrete, we tried everything – we were young

and we believed implicitly in the extolled virtues set out in the stream of pamphlets which accompanied our daily post. And so with childish growing pains the new architecture developed.

Even before the War, Hanson asserted (1938:145) that sophisticated technologies were under researched in South Africa and the limitations imposed by existing technologies such as brick compromised architectural development.

The structural systems adopted for the house naturally bear an immediate relationship to the economic factor. South Africa reveals here the lag previously emphasised, so that the architect is restricted for the most part to the customary and traditional methods, namely, brick walling supporting the floors and roofs. Overseas developments in structure indicate to the architect the use of reinforced concrete slabs for these purposes, and of steel columns for points of support where necessary. These elements, at least, are required for research in the contemporary field. Actually, the limitations set by the rigid and unimaginative methods which are here economically possible, constitute an almost insuperable barrier to significant experiment. This must be borne in mind in any critical survey of modern South African architecture. It remains at present for the designer to extract the maximum from the available methods, and it is in this that the important achievement of the Pretoria house can be estimated (Hanson, 1938:145).

Alternative building materials were suggested by Biermann in 1945 in his

... paper on "Mud as a Building Material", in which he pleaded for a scientific approach to building in mud. He stressed the sociological and aesthetic aspects, but his plea was at base an economic one. The paper elicited much favourable comment, but was predictably not taken seriously by housing authorities (Fagan, 1991a:7).



Figure 4.14. **Left:** The living room of residence Wooll by Stauch and Wepener (1950-51) showing mono pitch roofs (Anon, 1952a:196). **Right:** View of living room of House van der Merwe in Menlo Park, Pretoria (1951) with similar mono pitch roofs (Anon, 1952a:196).

Spatial economy was also a major concern of the time. Hellmut Stauch used the monopitch (see Fig. 4.14), as he believed the 'pitched roof combined with a flat ceiling wasted valuable space' (Nation, 2003:2). Cooke (1993:30) notes that Kantorowich was critical of the Corbusian spatial system which created wasteful and awkward spaces through the structural separation of wall and column. Plans were often organized to limit circulation space, with most relying on a central entry point or movement through dining spaces as can be seen in the economic plans of Cole-Bowen (1953:36-49) (see Fig. 4.15), whose work Fassler (1956:178) describes as attractively economical with a clear rationale.

[Bowen] uses brickwork, mostly the cheapest varieties for the carcasses of his buildings. These are roofed with timber rafters spaced on a module related to the fenestration. Above the rafters boarding carries the purlins. The spaces between the latter are filled with exfoliated vermiculite. Galvanized corrugated iron sheets screwed to purlins finish the roof. Exposed timber surfaces are left natural. Brickwork is sometimes colour washed, or left plain. Floors are brick, quarry tile or slate. With the exception of the kitchens there are very few applied internal finishes, the principle followed being that anything built is final. No second or third processes are needed.

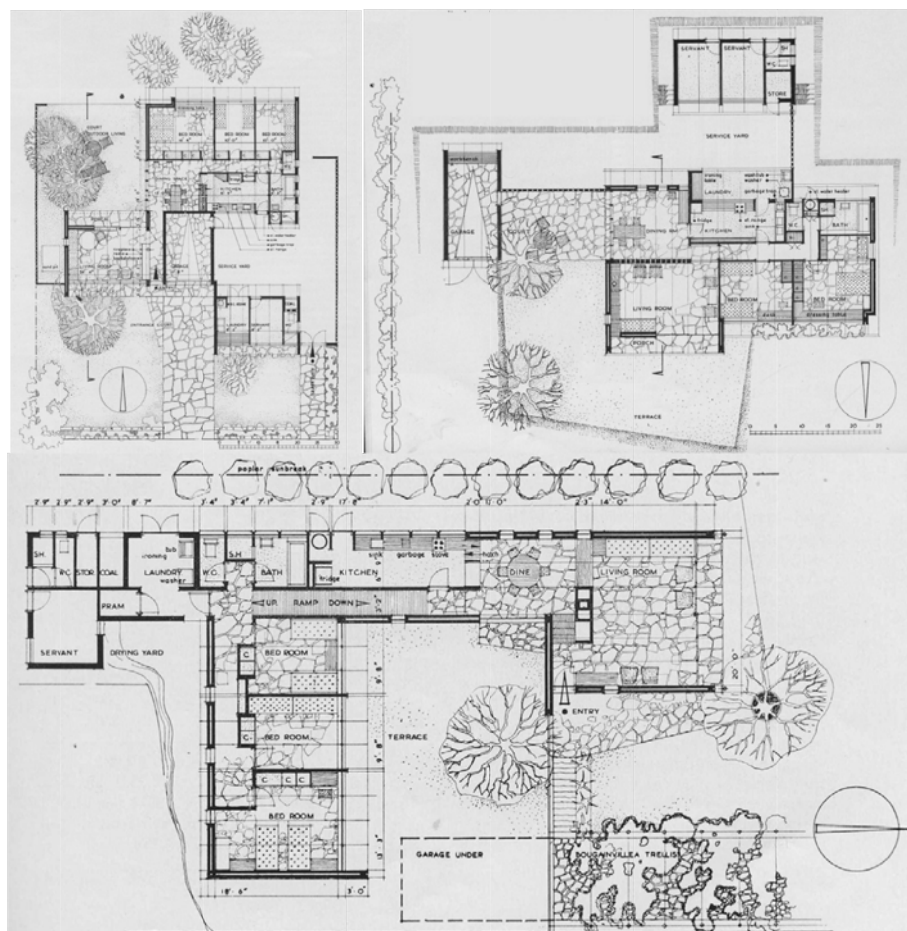


Figure 4.15. Three Cole Bowen plans. **Top left:** House Hester of 1950 (Cole Bowen, 1953:38). **Top right:** House Vincent of 1950 (Cole Bowen, 1953:43). **Bottom:** House Collins of 1951 (Cole Bowen, 1953:46).

The influences of Stauch were evident and a trend for the domestic architecture of the time was

set. It was, however, the principled manner of execution, honesty in expression and inventiveness with materials that was to have a long lasting effect on Fagan.

4.3.5.8 Johannesburg and Pretoria

The comparatively sleepy hollow of Pretoria was in stark contrast to the urban nature of Johannesburg.

While Johannesburg exploded from a boisterous mining camp into a modern cosmopolitan city, the early development of Pretoria was far more leisurely and characterised by an almost rural atmosphere (Anon, 1965:44).

In *Architecture of the Transvaal* Peters (1998:175) notes that two major events marked the shift of the 'architectural cutting edge' from Johannesburg to Pretoria. These were the establishment of the first Afrikaans School of Architecture and the untimely death of Martienssen¹³⁴. The school was founded in a time of material and monetary shortages which fuelled an architectural education of simplicity and economy, much more regionally biased than that of the Wits school. The technological problems associated with much of the Johannesburg Modern Movement architecture called for improvisation and experimentation (McIntosh, 1956:23). The Afrikaans students were also more susceptible to new influences (Prinsloo, 2000:110), while Howie (Chipkin, 1993:279) observes that young architects in Pretoria were pragmatic designers rather than philosophers:

The main reason for [the school's] patent success, though, was probably largely due to the approach and style of its strongest lecturers – South, Cole Bowen, McIntosh, and Stauch. Each of these, in his own inimitable way, was committed to architectural excellence. Each was a proponent of the Bauhaus¹³⁵ approach, although McIntosh was more influenced by Frank Lloyd Wright. The “form follows function” principle dominated and this married very well with the frugal approach thrust upon us all by general post-war shortages (Nation, 2008:9).

The beginnings of the shift in architectural influence between Johannesburg and Pretoria can also be seen in the polemic between Moerdijk and Fassler in the journal 'Trek' (Chipkin, 1993:279). The nationalist fervour in Pretoria was to have a marked impact on the development of a regional architecture. Moerdijk criticised Johannesburg architects' association with international architecture:

All true art is national, in other words, to be good or true, art must reflect the manners, habits, customs, traditions and cultural development of the people

– ¹³⁴ McIntosh (1956:22) indicates a third, namely the establishment of the South African Iron and Steel Corporation.

– ¹³⁵ This should include the Ittenschule as well to distinguish the industry bias of the Bauhaus. Nation clearly indicates in her thesis (1985:7) that Stauch was educated at the Arts and Crafts inspired Ittenschule.

responsible for its creation.

Many architects that were working in Pretoria had been trained at Wits and so

... the same influences which generated the modern movement in Johannesburg were present in Pretoria. However, probably because of the less insistent demands [initially] for buildings, its impact was far less (Anon, 1965:45).

Fisher (Prinsloo, 2000:96) indicates that the prerequisites for a regional style were all present in Pretoria during the 1940s and 1950s: graduates fresh from a pragmatic education, state commissions to further nationalism after the election of the National Party in 1948, an improved patronage of the modern aesthetic and a "rich diversity of indigenous building materials". The architecture of Pretoria in the 1940s and 1950s was more versatile and adaptable than its orthodox Johannesburg counterpart (Herbert, 1975:152). Its cohesiveness was realised through a continuity of architecture from Baker to Gordon Leith (Anon, 1965:40) and later to Eaton, who had fortunately left Wits before orthodox teaching had taken root (Gerneke, 1998:211). The Pretoria influence began to loom large.

In the post-war years some significant architectural influences entered Johannesburg from the work of the Pretoria School – the most accomplished, the most vibrant of the regional architectural styles that evolved in post-war South Africa. A whole group of mainly Pretoria architects became household names in Johannesburg: Strauss Brink, Meiring & Naudé, Philip Nel ... But undoubtedly the most charismatic of the Pretoria practices at this time was the office of H. W. E. Stauch ... The Pretoria architects, more cohesive and better disciplined than their Johannesburg confreres, were also imbued, like the architects of Finland, with greater regional sensitivity ... They were an unquestioning professional elite, many of whom came out of the new School of Architecture at Pretoria University, imbued with the ethos of modernity and renewal under the observant eyes of the new political patronage that emerged after 1948 when the National Party came to power (Chipkin, 1993:278).

4.3.5.9 Foreigners and locals: a synergistic relationship

The Ittenschule and Technische Hochschule trained Hellmut Stauch (Nation, 1985:7) had a long-lasting effect on the domestic architecture of Pretoria. The Rousseauian philosophical direction of the Ittenschule distinguished it from the Bauhaus's more direct relationship with industry. It therefore represented a less radical or revolutionary approach to the making of architecture, aligning itself more closely with the Arts and Crafts direction of Baker, Leith and Eaton. Not unlike the Bauhaus trained architect Pius Pahl, who worked in the Cape, Stauch managed to synthesise his European training with local circumstances to achieve a unique synergy between modernity and tradition. But Stauch's German training was perhaps an already

mediated modernity as

... a common feature of Modernist houses in the 1930s was the use of natural flagstones which ran uninterrupted from exterior veranda to interior living room. Architects discovered that they could reap the benefits of using natural materials – brick, stone and wood – while still introducing the open spaces and generous expanses of glass which demonstrated the separation of structure from enclosure and which defined Modernism in architecture (Benton, 2006:87).

Professor Meiring's (1904-1979) appointment of a small group of like-minded teaching staff such as Stauch, Eaton, McIntosh and Cole Bowen (Peters, 1998:176) would foster a regionalist direction in the teaching at the new Pretoria School. McIntosh's initial orthodoxy had developed a regional bias in his own house through its rough brick walls, while Cole Bowen's early Wits training, absence from the country during the war and friendship with Stauch limited the effects of an International Style approach to architecture.

The Dutch brick tradition also played an important role in the development of architecture in the Pretoria region.

The Boers did not develop the essential materials of building and far less a fitting architecture of those materials and of their social system. They were not unaware of the need for such a development and turned to Holland, where ties of blood/language and religion were powerful incentives to seek closer cultural links. Numbers of Hollanders came to the Transvaal where they played a part in forming the nucleus of a more efficient civil service; in placing education on a sound footing; founding a working public administration; and participating in the design and construction of public buildings. They both influenced the training of artisans and encouraged the appropriate use of locally-produced materials (Anon, 1965:44).

4.3.5.10 Modern Movement mutations: Europe and the rest of the world

It was as late as the 1940s, when the International Style was grafted onto the exuberant indigenous architecture of Brazil, that the stage was set for a second wave of the Modern Movement (Gerneke, 1998:197).

It was in Brazil that the orthodoxy of Le Corbusier found a new life through the adaptation of his principles by architects such as Lúcio Costa¹³⁶ (1902-1998) and his protégé Oscar Niemeyer (Chipkin, 1993:230). Le Corbusier's visit in 1937 must have been instrumental in this regard as it fostered a regional variation of his theories particularly through the development of the *brise-soleil*. The 1943 Museum of Modern Art (MOMA) exhibition and subsequent publication of

– ¹³⁶ See Appendix J.

"Brazil Builds" brought these new mutations to the rest of the world, including South Africa. Prior to this publication, newspaper articles had also highlighted the new developments and Chipkin (1993:231) notes that prof. Pearse of Wits owned an early copy of "Brazil Builds", dated 1944. The 1950 monograph on Niemeyer by Papadaki (De Beer, 2000:110) added impetus to the advantages of employing South American adaptations in the Transvaal climate. The effect on the architecture of Pretoria is still visible to this day. Stauch's visit to Brazil at the end of 1948 inspired his design of the Meat Board building in Pretoria (see Fig. 4.16) which opened in 1952 (Chipkin, 1993:282). Fassler (1956:178) notes that the Brazilian influence can be seen in the work of Philip Nel and Partners, Stauch, and Meiring and Naudé of Pretoria and Cape Town. The legacy of this mediated Modern Movement would have a long-lasting effect on the graduates of the Pretoria School who could identify with an appropriate regional interpretation. Fagan suggests (2008a) that the affinity of the Afrikaner for the language of Portugal and thus the South Americas played a role in this interpretation.



Figure 4.16. Left: Stauch's Meat Board building of 1952 in the centre of Pretoria (Author, 2008). Right: Niemeyer's Ministry of Education and Health building in Rio de Janeiro completed in 1943. (<http://www.flickr.com/photos/14479222@N04/6783311971/> [Accessed 02/05/2012]).

Fagan's summation of the situation at the time highlights his understanding of Le Corbusier's influence in Brazil through Costa and Niemeyer. The last line of the quote is both insightful and curious as it postulates that both Baker and Eaton were not well located to develop a similar response in South Africa:

Onder aansporing van Corbusier het hulle met sonbeheer die klimaat probeer aanspreek, en met beton die relatief swak gehalte van die plaaslike vaklui, met 'n besondere vormgewing (ook 'n produk van hul flambojante gebou-erfenis en tropiese weelde) tot 'n herkenbare styl verwerk. Vir Herbert Baker en Norman Eaton was die sameloop van omstandighede in Suid Afrika seker nie reg nie (Fagan, 1990:2).

[Through the encouragement of Le Corbusier they attempted to deal with the climate through sun screening, and with concrete the relatively poor quality of workmanship of local workmen, with a particular form making (also a product of their flamboyant building tradition and tropical profusion) developed into a distinctive style. The confluence of circumstances in South Africa was probably not right for Herbert Baker and Norman Eaton.]

4.3.5.11 Industry and art (standard and unique)

Perhaps the most significant event which was to influence the growth of Pretoria was the establishment of the South African Iron & Steel Corporation Ltd. (Iskor). The position of Pretoria as an industrial town was confirmed and with the growth of steel came the growth of secondary industry – Pretoria grew out of infancy into adolescence (McIntosh, 1956:22).

Iskor was established in 1928 after a government-promulgated act which saw the government owning 99% of the shares due to a lack of public interest (Muller, 1984:418). Until then, most standardized building products were sourced from overseas (Anon, 1965:38), save for the brick provided by the Kirkness factories. In 1936, Iskor (Anon, 1965:38)¹³⁷ began producing steel roofing sheets and standardized steel windows on a 3'4" module. These were to become part of the Pretoria regional aesthetic through the work of architects like Stauch (Peters, 1998:185) and Cole Bowen (Fisher, 1998:132). The modules developed a particular aesthetic but also assisted in the development of a structural logic. Steel roof sheeting was economically and climatically advantageous as it allowed for lower roof slopes, larger overhangs and limited roof structure.

One could argue that the antithesis of standardization is art and that craft is a mediative condition. Yorke's (1946:28) criticism in *The Modern House* of the twee materiality of the cottage (see below) and the necessity for the industrialization of architecture highlight the mediative condition that many Pretoria architects were to employ. 'Old' materials did not have to be discarded; they just needed to be used in a 'modern' way.

Brick and tile or slate may still be the most economical materials for the individual cottage, but such a type of cottage is surely obsolete. If we are to achieve a twentieth-century small house architecture, we must consider the cottage a mass-produced industrial product (Yorke, 1946:28).

Concomitant to the limitations and shortages of materials, there was a fervour amongst artists such as Pierneef and Anton Van Wouw¹³⁸ (1962-1945) and writers such as Gustav Preller¹³⁹

– ¹³⁷ Fisher (1998:131) notes 7 May 1937.

– ¹³⁸ See Appendix J.

– ¹³⁹ Pierneef was a friend of Eaton's while Van Wouw and Preller became clients (Fisher, 1998:124).

(1875-1943) to capture the essence of the natural order inherent in the landscape of Africa and the Transvaal. This was enhanced by Afrikaans writings on architecture of the Highveld by Moerdijk, Pierneef and Leith (Prinsloo, 2000:94). These influences, amongst others, propelled 'regionalist' architects like Eaton to reconcile the dichotomies of industry and art¹⁴⁰ through the inventive use of elements such as brick and tile (see Fig. 4.17). Eaton's woven walls¹⁴¹ and patterned woodblock floors are demonstrative of a craftsman using standardized materials at hand to create a regionally rooted idiom. In fact, he saw that the use of these items was a way out of the "inconsistency, incoherence, disharmony, and general chaotic ugliness of architecture" (Harrop-Allin, 1975:26).



Figure 4.17. Left: The ceramic screen of Eaton's Netherlands bank in Durban 1961-5 (Author, 2004). Right: Eaton's woven brick wall at the Little Theatre in Pretoria (c.1950) (Harrop-Allin, 1975:97).

4.3.6. Summary

Mediations between an already mediated Modern Movement canon and local circumstances gave rise to a sophisticated regional modern architecture in Pretoria during the 1940s and 1950s. It was not unlike regional modern architecture to be found in other parts of the world, such as Brazil or areas of the 'Bay region' (Barr *et al*, 1948:4) of North America, where the International Style was tempered by local conditions. The problems stemming from the stylistic application of the International Style, climatic effects, available materials and the economic legacy of the Second World War forced architects to find innovative ways of dealing with the exigencies of place and modern functional requirements. The legacy of a third Modern Movement in Pretoria provided a solid foundation for the development of Fagan's reflective modernism. His pragmatic education and the influence of a cohesive and powerful group of regional practitioners and teachers in Pretoria paved the way for an architecture that would

– ¹⁴⁰ Harrop-Allin (1969:28) notes that Eaton had a great interest in and knowledge of the arts.

– ¹⁴¹ Fagan has noted that they, as students, were influenced by the built work of Eaton. As will be described later in Chapter 10.2.5.1. Fagan has extended the concept of the woven wall in his work.

mediate a centuries old tradition with new ways of living and alternative technologies. The second part of Chapter 7 will highlight how Fagan interpreted these influences to develop his own unique approach to issues of space and form in the Cape.