

ISSN: 1562-5257

VASSA Journal



Number 29

June 2014



Vernacular Architecture Society of South Africa



VASSA Journal

Number 29 June 2014

Contents

	Page
Gabriël (Gawie) Fagan: the genesis and development of a new Cape vernacular: <i>Arthur Barker</i>	1
Moordenaarsgat: a contested farm in the Kareebergen: <i>Nigel Amschwand</i>	20

Cover illustration

Bedroom in Die Es, Camps Bay (A. Barker 2008).

The Vernacular Architecture Society of South Africa is not responsible for authors' opinions or factual errors contained in contributions.

© Vernacular Architecture Society of SA

Gabriël (Gawie) Fagan: the genesis and development of a new Cape vernacular

Arthur Barker

This article will explain the genesis and development of Gawie Fagan's approach to Cape vernacular traditions.¹

Introduction

By its very universality, our beautiful Cape Dutch architecture was long taken for granted, and it took fresh eyes, be it Rhodes, Trotter, Fairbridge, Mary Cook or James Walton to appreciate its unique qualities. And a born New Yorker, Arthur Elliot who had arrived in a cattle truck from Pretoria in 1900, to fix its ephemeral atmosphere in bromide (Fagan, 1993:1).

Through his continuous search for appropriate local form, Gabriël (Gawie) Fagan has, similarly to his esteemed colleagues, developed his own unique responses to the inherited Cape tradition, his mediated Modern Movement education and the topography and climate of the region he works in. He has elicited principles from the Cape vernacular, has manipulated Modern Movement principles and has exploited aspects of the natural environment to create a seminal architectural language, echoing the lamentations of the student below:

... 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).

Initiations

Fagan's love of the Karoo and its simple vernacular buildings started with his childhood vacation trips to his uncle's farm in the Hopetown area (close to the Orange River, south of Kimberley). A pragmatic and functionalist teaching methodology was employed at Pretoria University during Fagan's tenure from 1947 to 1951. It supported a return to first principles but adopted a more place-specific approach to the generation of architectural form.

Encouraged by Barrie Biermann, a twelve year stint as resident architect for Volkskas Bank contextualised and formalised his experiences through exposure to a range of places and built vernaculars. Through this work, Fagan documented and physically engaged with the historic architecture of many towns. He did not merely develop an aesthetic appreciation of vernacular buildings but also gained an intimate knowledge of materials, construction and climatic responses he encountered.

¹ Dr Arthur Barker is a Senior Lecturer at the Department of Architecture, University of Pretoria. This article is derived from his PhD thesis, *Heterotrophic syntheses: mediation in the domestic architecture of Gabriël (Gawie) Fagan* (2012), available at <http://upetd.up.ac.za/thesis/available/etd-09222012-131933/>.

Fagan's attitude to the vernacular

Fagan's experiences have sensitised him to an architecture of the authentic.

The greatest value of old buildings for all of us is that we can identify ourselves through the continuous thread of our communal culture with previous generations and so by better understanding them, reaffirm our own values (Fagan, 2002:1).

Fagan (1991a:3) explains that vernacular buildings done without the aid or intervention of self-conscious designers, tend towards a better balance with nature and are worthy of study on that score as well.

Fagan (1982:3) concurs with Rapoport (1969:5) who identifies the characteristics of vernacular architecture as being the lack of theoretical or aesthetic pretensions, working with the site and micro-climate, respect for other people and their houses and hence for the total environment, man-made as well as natural, and working within an idiom with variations within a given order. In his Sophia Gray Memorial Lecture, Fagan (1991b:10) quotes Venturi's take on tradition, reinforcing the idea that the use of the vernacular requires a deep and almost practical understanding.

Tradition is a matter of much wider significance. It cannot be inherited, and if you want it, you must obtain it by great labour.

Fagan's responses

Fagan's domestic architecture is influenced by the inherited vernaculars of the Cape region through a traditional architectural approach, founded on the old but developed to suit varying contexts, climates, available materials and cultural practices. Fagan regards these traditions as important for the development of architecture in South Africa and as Curtis notes (1996:568), many late Modern Movement architects made "an effort ... to unearth fundamental lessons in local tradition and to blend them with an already evolved modern language". Biermann (Fagan, 1996a:5) had expressed the same intention when referring to the importance of Cape Dutch architecture:

A real appreciation of the underlying principles embodied in this early work – rather than only a superficial knowledge of its purely visual charm – will ... point the way to the revival of a truly great indigenous architecture in this country, different in function and outward appearance though the result must undoubtedly be.

Three overriding qualities frame Fagan's vernacular approaches. These are a respect for place, technology as craft, and the use of symbols. Fagan's approach to the vernacular is also generated by haptic and experiential approaches where view and tactile experience are synthesised with a Corbusian architectural promenade.

Dialectics in Fagan's vernacular

But to know the characteristics of a style is not necessarily to know how to emulate it (Fisher, 1995:1).

Fagan has developed a unique, thorough and principled understanding of the Cape vernacular. He has steered away from a superficial and aesthetic interpretation, preferring to elicit principles that have informed the local tradition. These 'rational' informants are positioned against a range of 'intuitive' responses. There is never a complete synergy of the oppositions but rather a solution in constant formal tension.

The rational and the corporeal

Fagan has, over time, been able to concretize a rational approach to tradition through his development of a set of principles in “Learning from the vernacular”. These principles were elucidated years after being put into practice and can arguably be described as post-rationalisations. They do, however, encompass Fagan's understanding of the essence and meaning of traditional architecture and its partly conscious approaches. Although Fagan's architecture uses these intellectually driven approaches, corporeal design strategies act as counterpoints. They concentrate on the haptic aspects of design as they allow the visitor or inhabitant to experience space with all of their senses. The most developed of these experiences can be found in Fagan's own house Die Es (1965) in Camps Bay, Cape Town. The spatial qualities of the movement route are accentuated through the use of different floor materials. At various points along the route, changes in direction occur which are defined by differences in floor material and spatial enclosure. At the climax of the entry route, there is a change in sound from the stone tiles of the hallway to the concrete of the living space, mediated by a steel-framed timber platform (see Fig. 1). Through aural, spatial and physical means the architect imbues each space with a different quality and forces the inhabitant to make a decision about further movement.



Figure.1. Left: Steel framed timber platform at the junction of living and entrance hall at Die Es (1965) (Fagan, 2012). Right: Similar platform at junction between passage and main bedroom at House Keurbos (1951) (Author, 2008).

Familiarity and strangeness

Fagan contrasts traditional and Modern Movement spatial and functional approaches in the design of his houses, the former fostering a connection to the past and the latter expressing modern ways of living and making.

Fagan favours the exaggerated use of a chimney to connect with the past. Its original position in the vernacular houses of the Cape played a functional role as a place of cooking and source of warmth. Families gathered around the fireplace and the surrounding space became the focus of the home. Fagan extends the functional role of the fireplace to a spatial one, as the hearth is extended to form a room. This can be seen in Die Es (1965) and House Visser (2011) in Langebaan (unbuilt) (see Fig. 2). Fagan also shifts the positioning of the chimney from its original end condition to often frontal or central locations to act as symbol or focus. Another manipulation of the fireplace occurs when flue becomes both structure and support. In House Raynham the flue is attached to a column which acts as roof support but in House Neethling (1983) the two elements engage (see Fig. 2). In Houses Swanepoel in Hermanus (1990) and Beyers (1998) in

Betty's Bay the flue rises through a glazed roof connection where structural logic is almost defied, allowing the flue to read as an independent element (see Fig. 4).



Figure 2. Top left: Model of House Visser (2011) (Author, 2012). Top right: Ground floor plan of House Visser (Fagan archive - Job No. 1102, 21/02/2011). Middle left: Plan of House Neethling (1983) (Fagan archive - Job No.8205, undated). Middle right: View of fireplace in living room of House Neethling (Author, 2009). Bottom left: Fireplace 'room' at Die Es (1965) (Author, 2008). Bottom right: Dormers at House Swanepoel at Cape St. Francis (1980) (Author, 2005).

Cape vernacular buildings either had simple single or double pitched roofs but Fagan imbues his roof designs with a sense of strangeness through the moulded and folded nature of the roof planes, particularly in houses Raynham and Swanepoel in Cape St. Francis (see Fig. 2). Here the roof breaks at unexpected points to allow in light and view. The overall pitched roof form is recognisable but a strangeness is evident in its configuration.

New and old

Fagan contrasts old techniques of building (particularly the stereotomic approach to the making of walls) with new technologies. For example, slatted timber doors are still made in a traditional way but are set in timber frames that extend upward to the ceiling plane and which contain clear and, often, unframed top glazing (see Fig. 3). This provides spatial continuity above but enclosure below.

Similarly, Fagan counterpoints traditional introverted cellular spaces with extroverted flexible space, all contained within one form and mediated by an internal circulation route. House Swanepoel in Hermanus (1990) (see Fig. 16) contains cellular edge spaces with an enclosed courtyard and a partly enclosed living space that mediates between the two conditions. House Beyers in Betty's Bay (1998) (see Fig. 8) has a central living space framed by cellular bedroom spaces on western and eastern edges.



Figure.3. Top left: Glazed fanlight to passageway at House Levin (1969) (Author, 2009). Top middle: Frameless top glazing to door at House Raynham (1967) (Author, 2008). Top right: 'Frameless glazing' to western edge of living room to House Patterson (Author, 2008). Above: Glazing between roof rafters to House Blommaert (1982) (Author, 2009).

Learning from the vernacular – ten lessons

En met kenmerkende deeglikheid word elke gegewe in die proses geboekstaaf, word sy besluite op skrif gestel sowel as in die bouwerk self verantwoord, met die besef dat eendag ander weer in sy spore sal moet volg (Biermann, 1975:2).

[And with characteristic thoroughness every informant in the process is justified, and his decisions are written down and accounted for in the building work itself, with the realisation that others will have to follow in his footsteps].

In a lecture given in 1996 entitled “Learning from the Vernacular”, Fagan lists ten important lessons to be learnt from our built heritage. He indicates that they are all founded on a premise of dignity and fitness for purpose. These principles are a summation of years of conservation experience that impact on the making of new form through mediated responses to program and context. These approaches underpin the vernacular as source of design inspiration.

1. *Simplicity and economy of means*

Simplicity ... is the essential part of order in life. The discipline and restraint used in the old buildings of the Cape is only rarely to be found in buildings today. It is difficult but necessary to find that simplicity and a new serenity expressed in new terms (Schlapobersky, 1965:32).

Fagan understands the simplicity of Cape vernacular traditions as related to a common sense building approach. Problems associated with climate and functional organization had to be solved and builders used what they had at hand. This fostered an inventive approach.

The builder would also economize by using materials at hand such as reeds for the ceilings and dung for the floors, often showing wonderful inventiveness such as using peach pips for a hard yet decorative floor. I am not suggesting for one moment a return to an arts and crafts approach, but do know that I have been able to bring a lot of ideas to bear on my designs possibly by my engineering training, working with materials like designing and moulding this fairing for my favourite mount, or even just extensively rebuilding my yacht (Fagan, 1985:7).

Building economically means doing the most with the least. This vernacular attitude was reinforced during Fagan's studies at the University of Pretoria, when material shortages were experienced during the Second World War.

Cole Bowen, within the limited budgets of his clients, used the standard steel windows as a module for his rafters, and this simplicity, combined with space-saving and an honest use of materials, produced some very interesting houses (Teeger, 1965:7).

Similarly, Fagan was forced to provide economically sustainable solutions when working on smaller Volkskas banks in outlying areas. Fagan also achieves an economy of means by using elements to perform more than one function. The foyer to his parents' house in Newlands not only merges internal and external conditions (see Fig. 4) through a glazed roof but provides adequate solar gain onto a tiled concrete floor. This acts as a heat sink in both summer and winter. The steel roof collars in his houses in Betty's Bay (1998) and Hermanus (1990) act as roof and flue supports (see Fig. 4).



Figure 4. Left: Foyer and dining area of House Keurbos (1951) flooded with light from glazed roof over (Author, 2008). Middle and right: Steel roof collars to House Beyers in Bettys Bay (1998) and House Swanepoel in Hermanus (1990) act as roof and flue supports (Author, 2009).

2. Structural integrity and honesty

Most vernacular building makes sound common sense, and what I would like to describe as the inherent structural integrity of our Cape Dutch tradition is well explained in this sketch by Barrie Biermann [see Fig. 5]...To my mind, its beauty resides also in its lucid but unforced expression of its structure, and I am sure that this is a quality one could well aim to achieve (Fagan, 1983b:6,7).

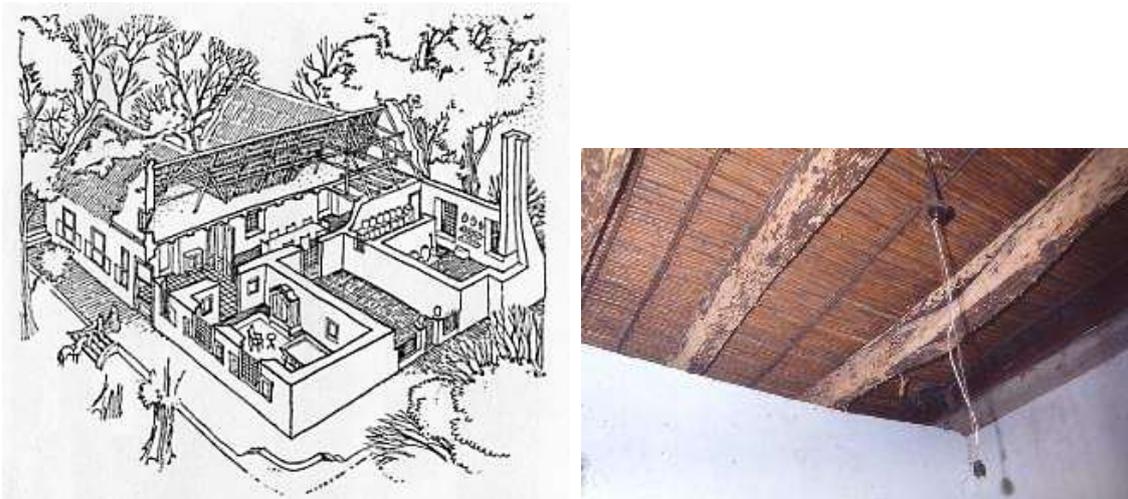


Figure 5. Left: Biermann's sketch showing the spatial and constructional layout of the traditional Cape house (Biermann, 1995:37). Right: Timber tie beams of roof truss supporting floor of roof space (Fagan, 2012).

There is a close synergy between vernacular approaches to technology and Fagan's own methods. Structural elements are minimised through the use of short spans. All materials (except walls) are expressed in their original state and junctions are simply but clearly articulated. In his own house Die Es (1965) he purposefully expresses the unplastered and unpainted in situ first concrete floor slab in the white facade (see Fig. 6). This lack of continuity in wall treatment seems incongruent but is in stark contrast to Le Corbusier's treatment of Villa Savoye, where disparate technologies are masked by a plaster layer. Fagan does however rely on the heterogeneity of traditional wall construction, where clay bricks are either plastered or bag-washed and painted to achieve a plastic continuity (see Fig 6).



Figure 6. Left: Bagged and painted brickwork to House Swanepoel in Cape St. Francis (1980) (Author, 2005). Right: Honest expression of different materials at Die Es (1965) (Author, 2008).

Fagan clearly distinguishes between stereotomic and tectonic elements. Where both are used they are separated by glazing, such as in the floor to ceiling panels in House Keurbos and the clerestories under the syncopated roof at Die Es. Where a consistent constructional methodology is employed the elements merge. This can be seen in the stereometry of the barrel vaulted examples such as Houses Lückhoff in Onrusrivier (1981) and Paradys in Langebaan (2003).

3. *Plasticity or modelling*

Probably the most beautiful and certainly the most unifying characteristic of our Cape Dutch architecture is the plastic quality of the softly plastered lime washed walls (Fagan, 1983b:6).

In a personal interview (2008) Fagan reiterated his admiration for the soft moulding of plaster, admitting that it has had a great influence on his work. But it is the effect of light on the walls that defines the plasticity. Fagan uses this quality to counter the tectonic monotony of many Modern Movement solutions.

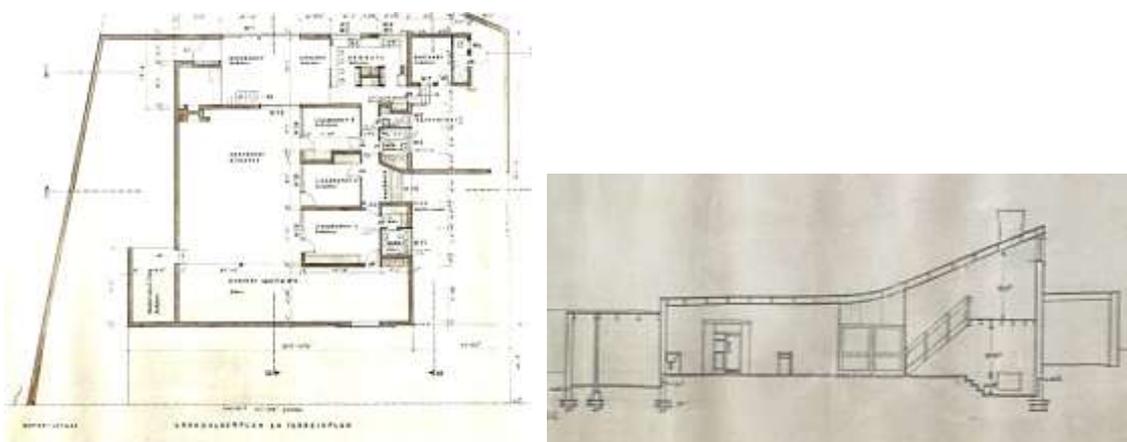


Figure 7. Left: Plan of House Patterson (1966) (Fagan archive - Job No. 655, undated). Right: Section through House Patterson (1966) (Fagan archive - Job No. 655, undated).

Fagan used this plastic quality in a very limited way in his first few houses. Experimentation gradually increased with each example. The initial designs reflect plasticity in wall finish only. In House Keurbos (1951) it is limited to the differently textured internal and external wall finishes, but a contrasting and moulded niche creates a plastic focus on the east-facing living room wall. The chimney wall is corbelled in a restrained formal manner. House Patterson (1966) (see Fig. 7) displays the same restraint in plastic articulation, but hints of plasticity can be seen in the curved junction of the living room roof.

In the next few projects walls are changed in orientation and height and finally a full plasticity is achieved in the volumetric arrangement of house Raynham (1967), where roofs and ceilings rise and fall as they create spatial continuity. In the houses that follow, Fagan alternates between a restrained and full-blown formal and spatial plasticity.



Figure 8. Top: Barrel vaulted roof at House Paradys (2003) (Author, 2009). Middle left: Barrel vaulted roofs to Idas Valley (1975) (Author, 2009). Middle right: House Lückhoff (1981) (Author, 2009). Bottom left: Proposed house with barrel vaults and linking mono pitch roofs to House Van Zyl (2007) (Fagan archive - Job No. 0702 24/03/2006). Bottom right: Model of House Visser (Author, 2012).

An in-between condition can be seen in the barrel vaulted structures that have either been built or proposed (see Fig. 8). The first was at Ida's Valley (1975) in Stellenbosch, where Fagan designed new workmen's houses. These houses were based on the precedent of brick vaulted tombs on the farm Meerlust, also in the Stellenbosch region. Fagan returned to the use of the vault in House Lückhoff in Onrusrivier in 1981. Here three barrel vaulted structures step back across the site to form private spaces, and the plasticity of the forms is heightened by the moulded chimney, internal arches and rounded, ship-like door

openings to the bathrooms. It would be more than twenty years before Fagan would return to the barrel vault form when he completed his own holiday house at Langebaan. Here Mediterranean and Corbusian influences can be seen, and the plasticity of the vaults are complemented by the chimney inspired by Pancho Guedes (1925-) and a few ship-like door openings, once again to bathroom areas.

House Van Zyl (see Fig. 8), proposed for a Stellenbosch university professor in 2008, never reached the construction phase but its design is a masterful play on the relationship between plasticity and formality. A series of barrel vaulted roofs step down a sloping site but are separated from one another by contrasting ‘flat’ roofs. Here the plastic quality is a synergy of form and site. The double-storey proposal for House Visser in Langebaan is capped by a number of barrel vaults with an awkward centre spine and splayed street junction.

4. *Appropriate and consistent detailing*

So for instance, although the same basic type of pintle and strap hinge serves for the humblest cottage or finest house such as here at Boschendal, the size and execution is always cannily suited to the occasion (Fagan, 1983a:7) (see Fig. 9).



Figure Error! No text of specified style in document.9. Top: Continuity of hinge detail in various Cape vernacular doors (Fagan, 2012). Bottom: Sophisticated detailing of wall cupboard in Cape Dutch homestead and simple clock niche in vernacular house (Fagan, 2012).

Fagan explains that his office does not build up a set of standard details, but that earlier work is referred to and adjustments are made to details. This follows the common sense approach of the builders of old. The appropriateness of detailing can be seen in the pragmatic yet sensitive way in which junctions and fixings are handled. Fagan's approach alternates between the simplicity of the continuous reinforcing rod handrail at Die Es (1965) to the sophisticated hand-operated louvered sunscreen and front door at Keurbos (1951) (see Fig. 10). The door handles to Die Es are not only 'rationally' designed according to the Hambidge system but also haptically suited to the action of the hand. In true Fagan spirit, he made them himself (see Fig. 10).

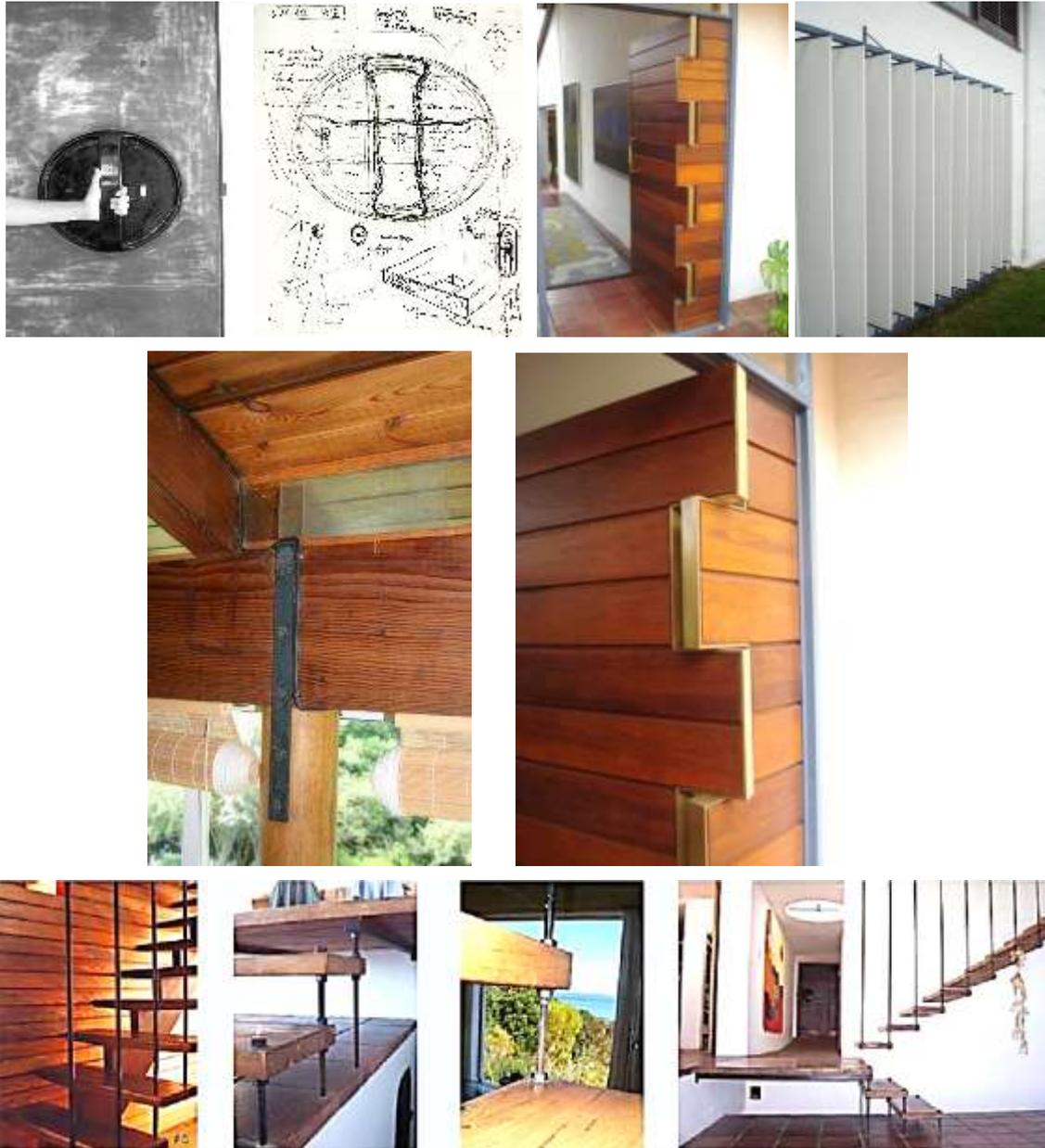


Figure.10. Top left: Front door handle to Die Es (Fagan, 2012). Second from top left: Fagan sketch of front door handle (Fagan, 2012). Second from top right: Front door to House Keurbos (1951) finally completed in 2008. (Author, 2009). Top right: Sunscreen to second bedroom at House Keurbos (Author, 2009). Middle left: Column and beam junction at House Keurbos (1951) (Author, 2008). Middle right: Detail of front door at House Keurbos (1951) (Author, 2009). Bottom: Details of stair at Die Es (1965) (Photos courtesy of Auret, 2005).

The detailing that Fagan uses is not only appropriate in its application and context but also consistent in its execution. He maintains consistency of idea and intention from concept to detail, (Fagan, 2008):

All elements should relate and enhance each other as far as possible so making the yard wall part of the house (as at Patterson or Hermanus) is an attempt to achieve this. See handrail at Die Es encircling the column, and aligning directly with the door handle (Door handle motif repeated in bedroom handles).

In Die Es, the plasticity of the main built form is extended to its subtle coved junction with the ground. The independent yet consolidated nature of stereotomic elements is expressed by frameless glazed junctions between the fireplace room and living room block. Through this logic Fagan attempts to create a wholeness of execution. These are “not just details but whole buildings – the same aesthetic – equally beautiful to everyone” (my translation) (Fagan, 1983a:3).

Fagan notes (1985:7) that this way of working was influenced by his engineering training and knowledge of materials through yacht and motorbike building. Added to this were the experiences of childhood making useful objects from found materials. Fagan started to build a plane in 1992 but it stands unfinished in the basement of his Bree Street office in Cape Town (see Fig. 11).



Figure 11. Unfinished aeroplane in the basement of Fagan's office (Author, 2009).

5. *Unity in diversity*

An enduring lesson in communal respect is learnt from a group of houses like those along Church Street in Tulbagh – all toeing the line set by the *rooymeester* [the local building inspector according to Fagan], all individual but yet forming a wonderful UNITY IN DIVERSITY (Fagan, 1996:5).

The reverence that early builders showed for the landscape was extended by Fagan to the urban condition and the interrelationships between buildings (Fagan, 1983a:4). New interventions built on a formal language but each example displayed its own nuances and subtle interpretations to avoid a monotonous approach. Fagan's 1981 Cape St. Francis house for the Swanepoel family forms part of a cluster of houses that had to subscribe to aesthetic guidelines in terms of wall finish, roof pitch and materials. Fagan extended the plasticity of the wall texture to wall and roof forms, creating a new yet recognisable identity among the mundane designs of the surrounding houses. Similar restrictions were in place for Fagan's own holiday house, Paradys in Langebaan, built in 2003. Here he introduced a Mediterranean barrel-vaulted roof element, in contrast with the flat roofed

aesthetic that was required (see Fig. 12). It took Fagan quite a while to have this and a blue colour accepted (in contrast to the required white) but now it has become part of the aesthetic guidelines. These manipulations unify the overall aesthetics of the development they are part of, but create a diversity of form.



Figure 12. Fagan and his wife Gwen on the terrace of their House Paradys (2003) on the left. The house sits comfortably with its rather ostentatious neighbours and forms a unity in diversity (Photo courtesy of Du Plessis, 2004).

6. Colour

The simple use of colour in vernacular architecture is best illustrated by the bright whites of Mediterranean architecture set against the blue hues of its window shutters.

In his 1985 lecture on regionalism, Fagan (1985:11) describes the colours of Cape buildings, suggesting that this inheritance was a result of the Dutch being of sea-faring stock and that their boats were painted with greens, blues and reds such as on Mostert's Mill in Mowbray, Cape Town. Also, houses on the Parade in Cape Town were painted in different hues to reduce glare but windows remained the standard green. This colour symbolised the mysticism of life and also expressed holiness to the followers of Islam. Contrastingly the blue represented the feminine principle of water.

So, as elsewhere, I used these colours on my holiday house design, which changes from predominantly green when shuttered, to blue when opened up (Fagan, 1985:11).

Fagan notes (1973:5) that he has used colour to support architecture by expressing different functions or elements. He has consistently used the colour blue on shutters to his holiday houses (see Fig. 13), all of which are located on or near the sea. The only exception is House Beyers (see Fig. 13) where a muted brown is used in conjunction with a similar green-blue, most probably due to the peripheral connection of the house to the sea. At Paradys in Langebaan a red hue dominates the rear wall (see Fig. 13) of the roadside facing and partly submerged courtyard. Here Fagan expresses a connection with earth.



Figure.13. Left: Courtyard to House Paradys (2003) (Author, 2009). Middle: Green and blue hues to doors at House Swanepoel in Cape St. Francis (1980) (Photo courtesy of Pierre Swanepoel architect, 2012). Right: Green and brown hues to House Beyers (1998) (Author, 2009).

7. Proportion (relation to the whole)

Fagan notes (1985:8) that the better Cape Dutch buildings were designed according to two types of proportional systems: either the concentric scheme or a system of squares and double squares (see Fig. 14). He suggests that these systems provide a sense of order and dignity to the buildings but that their use today is rather limiting.



Figure 14. Lewcock's proportional systems placed over various Cape Town Cape Dutch buildings (Fagan after Lewcock, 2012).

Fagan has used the Hambidge system of proportions which is based on the Fibonacci series and principles of dynamic symmetry. He substitutes the arithmetic calculations with a system of drawing that uses various diagonals, giving better control over the outcome (see Fig. 15). Hambidge warns of the dangers of over analysis “in forming design by a too intellectual process of area dissection. Balance must always be kept between technique and imagination” (Hambidge, 1932:xiii).

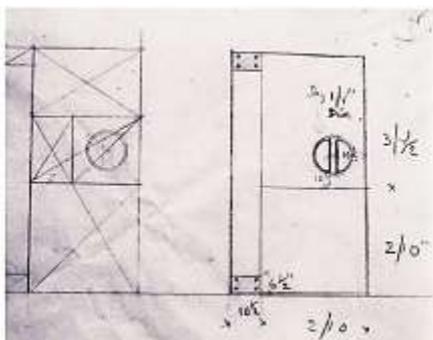


Figure 15. Proportional layout for door to Die Es (1965) (Fagan, 2005:36).

Although Fagan rarely uses proportional systems now as he does not draw that much anymore and the requirements of contemporary work do not allow for the time consuming process, he suggests that the understanding of the principles has trained his eye to become aware of their design possibilities.

Fagan also notes (1983b:51) that the layouts and plans of Cape Dutch farmsteads were clearly ordered in their arrangement, giving a clarity and dignity to the architecture. The singular legible statement of one main building is an aspect that Fagan has rigorously pursued in all his domestic architecture. Buildings are never made as a series of independent blocks. All accommodation is collapsed into a singular whole which is manipulated to suit the requirements of context or function.

8. *Human scale*

Closely related to proportioning but certainly less esoteric, is simply the matter of retaining a human scale. Large modern projects pose a problem here, but if one is fully aware of this problem, as when we were required to design a 600 student residence on what is predominantly a residential street in Stellenbosch, a breaking up of the plan and bulk of the building into units to which one could more easily relate can go a long way towards retaining a more human environment (Fagan, 1983c:51).

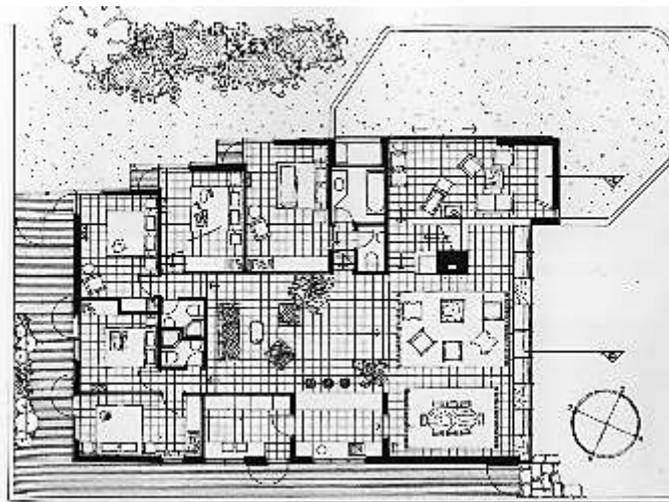


Figure 16. Top: Boundary walls merge building with landscape at House Swanepoel in Hermanus (1991) (Author, 2008). Bottom: Plan of House Swanepoel Hermanus showing tight service and generous living spaces (Fagan, 2005:103).

Fagan's use of scale establishes a close relationship between building and inhabitant, lessening the rationalist tendencies of late Modern Movement architecture. The approach also provides a positive connection between the built form and its surroundings. Fagan achieves this through the manipulation of form, definition of space, use of 'experiential' circulation routes, and detail carefully proportioned to the requirements of the human body.

Built form is usually scaled lower at entry points to create a sense of welcome. Edge conditions are also reduced in scale to allow the building to merge into the landscape as at House Swanepoel in Hermanus (1991) (see Fig. 16). Focus points, often around the chimney, allow the scale of the building to expand towards the living areas which have the highest volumes. A more intimate scale is given to the bedrooms, while service spaces are the smallest and most compact (see Fig. 16). A human scale is achieved in the circulation routes by using light, sun, view and dimensions to define them.

9. Relation to the environment

Fagan (1983b:4) explains that the early builders had time to think about the relationship of a building to its setting. Their responses were almost instinctive as they demonstrated a sensitivity to landscape rooted in their living close to nature. Fagan continues this tradition through his sensitive placement of buildings and the relationships he establishes with views, light and climate. Paradys in Langebaan (2003) stands in stark contrast to its double storey neighbours as it hugs the ground and allows views from the road to the sea (see Fig. 17). A limited accommodation schedule was certainly beneficial in this regard but the same approach can be seen in House Brink (2002) (see Fig. 17) where a large volume is disguised by using the slope of the site, with only one level being exposed to the road.



Figure.17. Top: First and ground floor plans of House Brink (2002) showing extent of accommodation (Fagan archive - Job No. 0206). Bottom left: House Paradys (2003) 'disappears' below the road (Author, 2009). Bottom right: Southern Bedroom at Die Es with high level views to the sky and distant focus on the Atlantic (Author, 2008).

Fagan establishes a corporeal relationship with the environment through the innovative positioning of openings in walls and roofs. Light is organized to connect spaces to the diurnal variations of the sun. Bedrooms in Die Es (1965) are connected to high mountain peaks and morning light through clerestory windows, while sea views and afternoon light is experienced through large floor-to-ceiling shuttered windows (see Fig. 20).

Orientation and thermal mass provide climatic control but often views and other contextual issues take precedence over orientation. Here Fagan will reinvent traditional elements like shutters to provide thermal comfort.

10. A progression of experiences

Fagan cites the importance of the experiential route of the Groot Constantia estate where an avenue of trees defines the path to the manor house. Fagan has based the circulation of many of his houses on this principle. He describes its first use in his parents' house in Keurbos in 1951:

On entry, a view of Table Mountain is glimpsed through a skylight, after which a short ramp brings one to a second level from where to the left may be seen an interior garden leading to the bedroom wing, and on the right a covered terrace leading to the garden outside. On descending the gentle ramp, the mountain view is partly unfolded below the overhanging eaves, and one turns back along your path to the lowest level with its comfortable seating and broad fireplace (Fagan, 1983b:6).

In Fagan's own house, Die Es in Camps Bay, completed around 1965, the visitor is taken on a journey that begins on entering Camps Bay through Kloof Nek. The panoramic ocean view is gradually hidden as the visitor arrives at the site. A woven brick wall obscures the view to the sea but allows light to filter through. The path to the front door becomes narrower and dips lower, and the texture of the paving changes. A foyer of light is revealed behind a solid front door and as the path flattens out it arrives at a timber platform suspended between the passage and living area. The route then turns to the left, and one can choose to go up to the bedrooms or descend to the living area. A further right turn in the living space focuses the view through floor to ceiling windows to once again connect with the sea beyond. Upstairs, the syncopated roof rises and falls to focus views to the mountains behind and sea to the west.

House Patterson (1966) in Somerset West is hidden from sight by a solid boundary wall, punctured only by a shuttered opening. The "house draws one, as into a spiral shell, towards the central hearth" (Fagan, c.1991:4). An entrance way accentuates an external route that ends in a ceramic-clad wall. A right turn focuses on the front door. On entry the curved and sloping roof reverses the visitor's direction to face a stair leading to a mezzanine area. At the top a distant view of False Bay is revealed.

House Raynham in Newlands, built in 1967, uses an abbreviated experiential route which focuses on a peak of the Table Mountain range. A gentle suspended ramp guides the visitor to the solid front door. On entry a narrow passageway focuses movement towards a floor-to-ceiling window. As the visitor moves closer, the view of the mountain is revealed (see Fig. 18).

Due to the constricted nature of the site and the large programmatic requirements, House Swanepoel in Hermanus concentrates the experiential route within the form of the house (see Fig. 18). A front door is merged with the garages but movement towards it is guided

by a garden retaining wall. On entry through this slatted front door the visitor is led up a short flight of stairs to a landing where he can turn either left or right. To the right is an indoor terrace room and to the left, up another short flight of stairs, is the main living room with roof focussed and structurally organized around a fireplace. This pin wheel junction turns the visitor to the left and directs his view to the sea beyond.

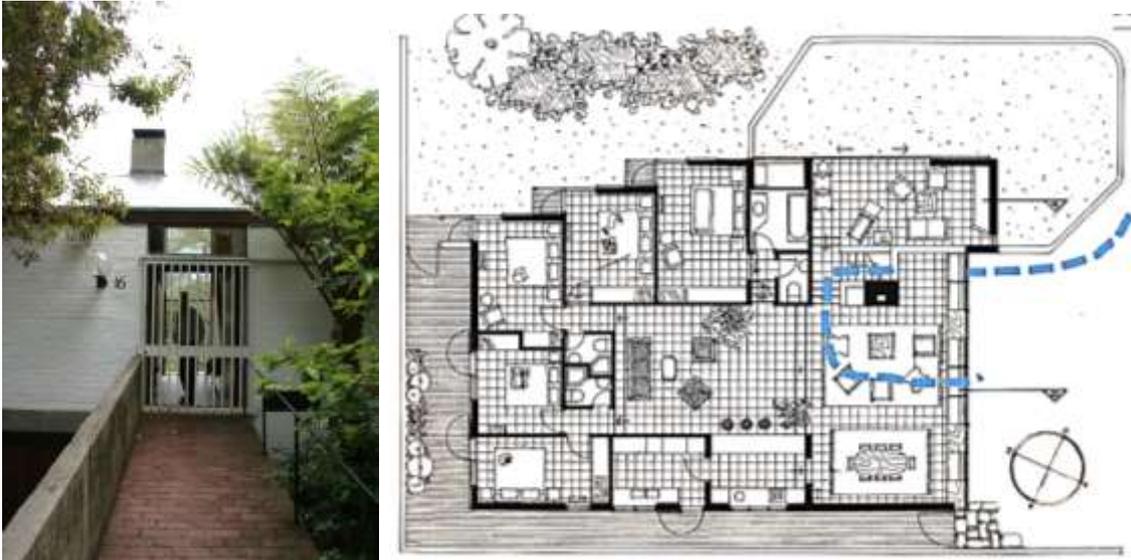


Figure 18. Left: Entrance way to House Raynham (1967) (Author, 2008). Right: Plan of House Swanepoel at Hermanus (1990) showing movement route that turns at 180 degrees to face the sea (Fagan, 2005:103).

Summary

Fagan has manipulated his “lessons from the vernacular” to transform and extend Cape building traditions to meet the needs of modern man, satisfy the determinants of context, and embrace the possibilities of new technologies. He uses these lessons to mediate between the extremes of conservative and interpretative approaches to vernacularism and the demands of modern times. The result is a series of architectural responses that alternate between the rational and the corporeal, familiarity and strangeness, and new and old.

References

- Biermann, B. 1975. Huldigingswoord: erepenning vir argitektuur aan Gawie Fagan. Die *Suid-Afrikaanse Akademie vir Wetenskap en Kuns*. Fagan Archive.
- Curtis, W. 1996. *Modern Architecture since 1900*. London: Phaidon.
- Fagan, G.T. & G. 2008. Interview with the author on 21 April 2008. 156 Bree Street, Cape Town.
- Fagan, G.T. 1973. Helshoogte opening. Stellenbosch. Unpublished lecture, Fagan

archive.

- Fagan, G.T. 1983a. Planning the urban environment. Lecture delivered at UCT Summer School, January 1983. Unpublished, Fagan archive.
- Fagan, G.T. 1983b. Architectural language. Paper delivered at the ISAA Architectural Congress, University of Cape Town, April 1983. Unpublished, Fagan archive.
- Fagan, G.T. 1983c. Architectural language. *Architecture South Africa*, 1983(5/6), 50-51.
- Fagan, G.T. 1985. Regionalism. Lecture delivered at Architecture Student's Conference, University of Cape Town, 4 April 1985. Unpublished, Fagan archive.
- Fagan, G.T. 1991a. The land of many peoples. Paper presented at the ISAA Congress, March 1991. Unpublished, Fagan archive.
- Fagan, G.T. 1991b. Sophia Gray Memorial Lecture, 29 August 1991. Unpublished, Fagan archive.
- Fagan, G.T. 1993. Old Cape Camera. Opening speech delivered at Hans Fransen book launch, 1 December 1993. Unpublished, Fagan archive.
- Fagan, G.T. 1996a. An enabling architecture. Eaton Memorial Lecture, Pretoria. Unpublished, Fagan archive.
- Fagan, G.T. 1996b. Learning from the vernacular. Cape Technikon. 2 September. Unpublished. Fagan archive.
- Fagan, G.T. 2002. The Castle of Good Hope. Unpublished lecture, Fagan archive.
- Fagan, G.T. 2005, *Gabriel Fagan. Twenty Cape Houses*. Cape Town: Breestraat Publikasies.
- Fagan, G.T. 2012. Open Lecture. Cape Peninsula University of Technology, 23 April 2012.
- Fisher, R.C. 1995. Norman Eaton - the scars of -scape. Inaugural Norman Eaton Memorial Lecture, Library, Sammy Marks Square, 28 October 1995. Unpublished lecture, Fagan Archive.
- Hambidge, J. 1932. *Practical applications of Dynamic Symmetry*. New Haven: Yale University Press.
- Herbert G. 1975. *Martienssen and the International Style: the modern movement in South African Architecture*. Cape Town: A.A. Balkema.
- Schlapobersky, 1965. House Biesheuvel. In supplement to the *South African Architectural Record*, June, 32-33.
- Teeger, E. 1965. Domestic architecture in South Africa from 1930-1965. In supplement to the *South African Architectural Record*, June, 5-8.

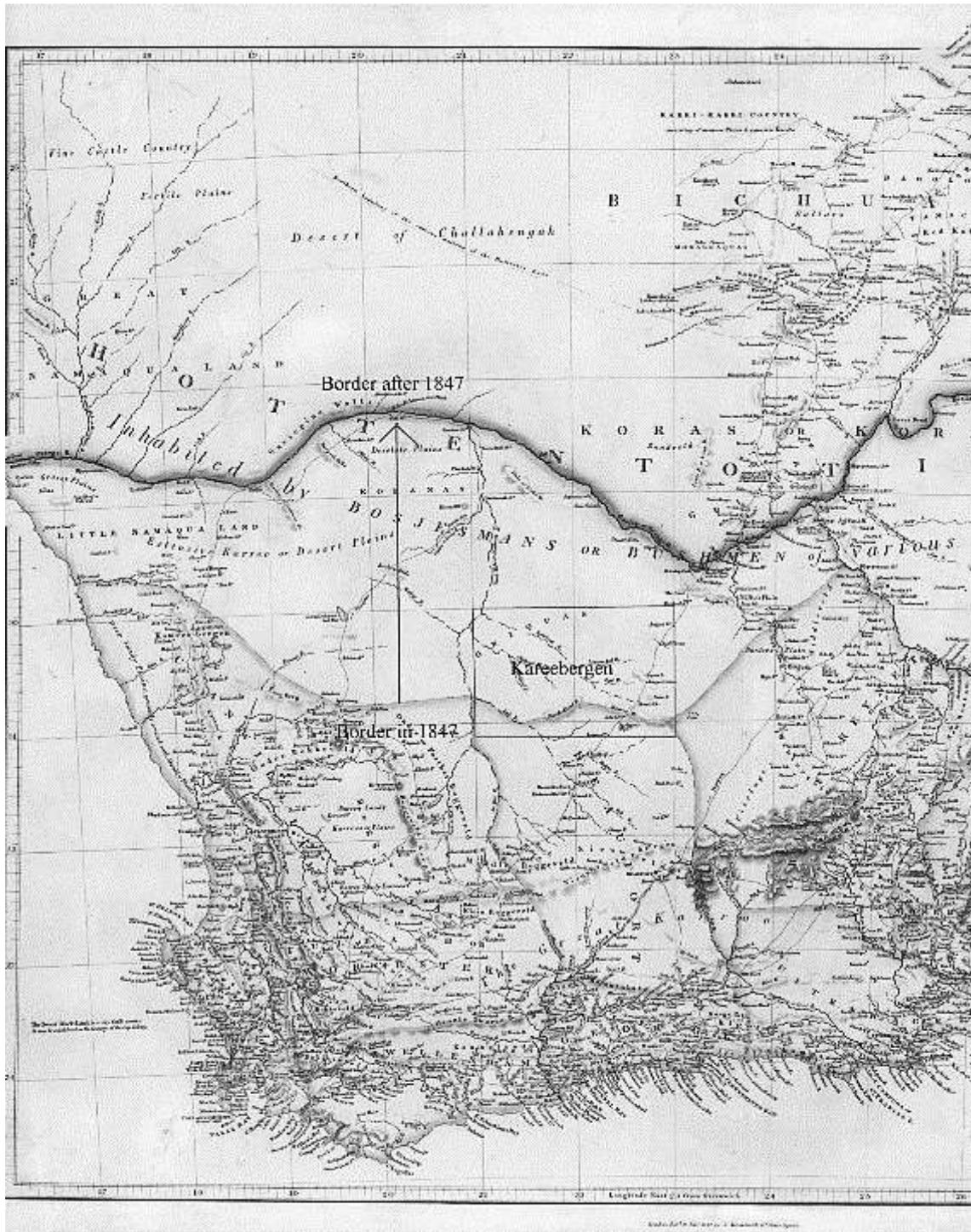


Figure 1. Arrowsmith's map of 1842 showing the borders and area of interest.

Moordenaarsgat: a contested farm in the Kareebergen

Nigel Amschwand

In 1847 the north-western border of the Cape was moved up to the Orange River (Figure 1). This brought land that was being shared by Basters, Khoekhoe, San and colonial Trekboers into the ambit of the Cape Government.

Two years earlier the Rhenish Missionary Society had established a station at Amandelboom (now Williston) on the Zak River to minister to the Basters in the locality. By moving the border, the Kareebergen now came under Cape control. This immediately caused claims and counter claims by the Trekboers and Basters for exclusive use of the pasturage in the Kareebergen. These are set out in ‘Correspondence on the subject of the Trekvelden near the Zak River’ issued by the House of Assembly¹. All the correspondence is dated 1848 and ends up with an instruction that grazing licences are to be issued to whosoever requested them at a rate of:

For every one hundred sheep or goats	6d per annum
For every ten head of cattle or horses	6d per annum.

For farmers only migrating there for six months, half the above rates were due.

This situation carried on for a number of years and the grazing was shared by the various groups with differing levels of conflict.

In 1853 the Cape received representative government. Prior to this it was controlled by the British Colonial Office. This latter organisation had set minimum prices for land that had stifled sales. The new Cape Government, needing revenue, wanted to auction off available land but without the minimum price of two shillings per acre. Some land was only worth two pence an acre.

The impending sale of farms in the Kareebergen caused the Amandelboom missionaries to claim many of the best farms in the surrounding area, on the Baster’s behalf and for their sole use. This was hotly contested by the colonial Trekboers from the Hantam and Onder-Roggeveld.

The Cape Government set out the requirements necessary for the Basters to be able to claim farms. Amongst these requirements was proof of “sole, undisturbed, and continuous occupation since the close of 1847”. This caused great difficulty, as even with a farm having a strong spring and good grazing, in times of drought it was necessary to trek elsewhere. Analysis of tax records in the second quarter of the 19th century for the Onder-Bokkeveld and Onder-Roggeveld indicates that the majority of farmers had at least twice as many animals as their registered farms could support. The only way they could economically exist was to trek with their animals, and after the summer rains the best area was the Kareebergen.

Eventually seventeen farms were subject to claims by members of the Amandelboom mission.

¹ CA CCP 1/2/1/9 '61-A113

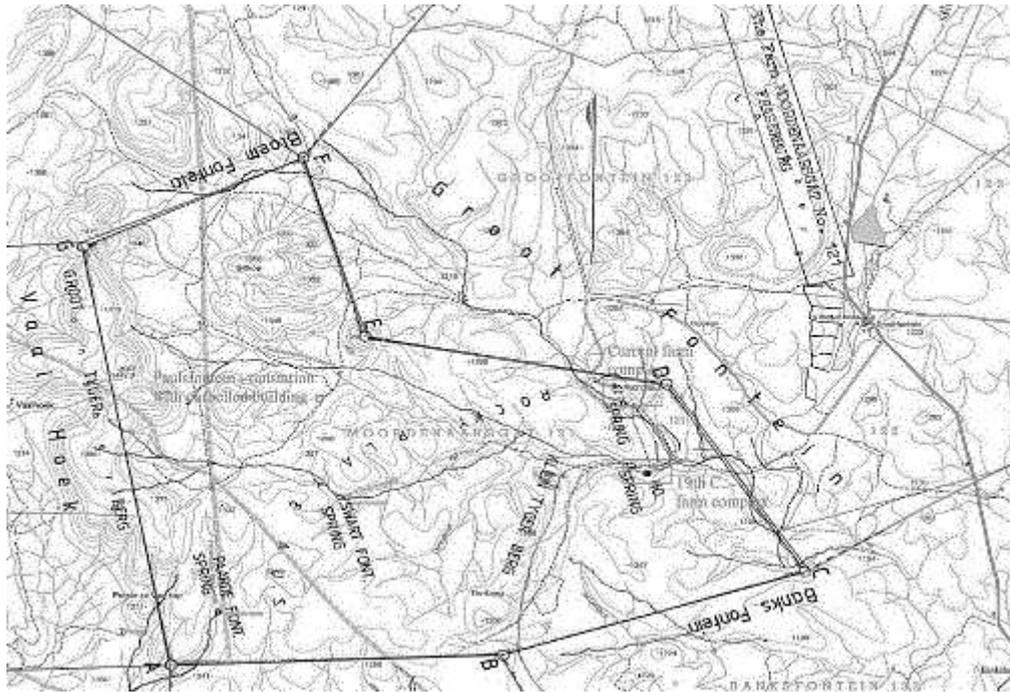


Figure 2. Part of the current 1:50000 map with the 1869 survey overlaid.

In 1856 a meeting was held at the mission to hear the claims of the Basters and Trekboers. This resulted in the publication of a ‘Report of an Inquiry into the Claims of the Natives at Amandelboom’ in 1859.² After the various claimants were heard, only three Basters were considered to meet the requirements for being granted their farms. These were the farms Grootfontein, Groot Paardekloof and Grootmeestersklip.

After the Cape was granted representative government, a Select Committee of the House of Assembly was appointed to look into a new system of land alienation. It took some time, but in 1860 the Crown Lands Act³ was introduced. This act again stipulated that Crown Lands were to be auctioned subject to an annual quitrent, and at a reserve price sufficient to defray the cost of inspection and survey, etc. The title could be converted into freehold tenure by the payment of 15 years quitrent.

The Act is quite comprehensive, consisting of 32 clauses. One clause (25) states that if improvements have been made on the land, even if the person who made the improvements had no legal tenure, then the Governor could, at his discretion, have the improvements valued and if the occupier who made the improvements was not the purchaser then he was to receive two-thirds of the value, the balance going to the Government. The total value of the improvements made was to be added to the purchase price. A legal occupier would be entitled to all the value of the improvements.

The amount of land being sold was apparently thought to be insufficient, so the Crown Lands Act of 1864 (Act No. 19) was promulgated ‘To Provide for the Leasing of Crown Lands’, and for other purposes. This act allowed leases for periods up to 21 years by

² CA CCP 3/1/1/3 ‘G7-‘59

³ Act Number 2 of 1860: For Regulating the Manner in which Crown Lands at the Cape of Good Hope shall be disposed of.

means of public auction with a minimum price being set.

During a field trip in the Kareebergen to look for corbelled buildings, the farm Moordenaarsgat was visited (Figure 2). This farm is south-west of Grootfontein where an impressive corbelled building exists (a National Monument). At Moordenaarsgat there is also an existing corbelled building, at a stock post called Paulsfonteinleegte. The main farm buildings are situated in the valley of the Beeswaterleegte and use the current name of the farm, Avondrus. This settlement dates from 1890 although little remains of buildings of that time. Prior to 1890 the farm complex was situated in the adjacent valley of the Swartfonteinleegte.

The opportunity of investigating a farm complex that had been unoccupied for over 120 years was impossible to ignore. Time constraints did not allow for a visit to this settlement during that trip, but we returned a few months later.



Figure 3. Site plan.

The 19th century farm complex comprises a number of currently ruinous structures, as indicated on the aerial photograph (Figure 3). These include:

1. A round kraal with a smaller kraal inside of primitive construction, now difficult to discern, adjacent to the rising slope of the valley.
2. A square kraal of round boulders with an entrance on the north side.
3. A small two-roomed house.

4. A threshing floor with a *kafhok*.
5. Two rectangular, very low foundations that may have been the outline of stock kraals.
6. Some round collapsed stone structures, and one that may have been a corbelled building.

It is known that this area was occupied from the earliest times by hunter/gatherers (San) and from about 2000 years ago by pastoralists (Khoekhoe). The outlying kraals and those on the hillside are similar to those constructed by Khoekhoe but equally could have been built by Basters.

Archival research allowed a reasonably confident 19th century timeline to be constructed. Consultation in the archives of the farm lease records for the Fraserburg district enabled us to determine who had resided at Moordenaarsgat during the 19th century.⁴

1864 Leased for one year to Daniel Johannes Theron for £5-0-0.

1865 Leased for one year to Adriaan van Wyk for £21-0-0.

1867 Lease for one year to Captain Wilson for £31-0-0.

1869 Leased to F.J. Jooste for £12-0-0.

1872 lease for 21 years to Johannes Daniel Moller at £40-0-0.

In 1890 the farm was sold to Augustus Frederick Hodgson who, according to oral history, moved the settlement to its present position. It was suggested by Judy Maguire that this may have been due to *verbrakking* of the soil, i.e. the soil became infertile due to the build-up of mineral salts.

It was mentioned above that the 1860 Crown Land Act contained a method of compensating people who made improvements to their farms, even when they did not have legal title. This system was unpopular in many instances, as the Appraisers who valued the improvements (that could consist of houses, kraals, dams, water furrows, etc.) were not consistent in their valuations. This meant that an outgoing lessee could be paid less by his successor than he had paid himself. It was also often the case that the incoming tenant objected to having to pay more than what he considered the improvements to be worth.

Such instances occurred at Moordenaarsgat. Below is a synopsis of the copious correspondence contained in the Cape Archives:⁵

- H. Wilson, on behalf of his son C.H. Wilson and his son's partner W. Harvie, requested a reduction in the amount he paid for the improvements on the farm Moordenaarsgat, i.e. £122-0s-0d plus the appraisers fee of £10-5s-7d.
- Letter from P.J. Poggenpoel (who was a land agent and auctioneer in Fraserburg), to H. Wilson, 12th July 1866, stating that he leased the land for £31 on Wilson's behalf.
- Letter from P.J. Poggenpoel to H Wilson, 9th February 1867, mentions improvements to the value of £122. It also mentions that the country was very dry but they had a fine shower lasting two hours.

⁴ CA 1/FBG 8/4/1 to 5, Lease rent registers.

⁵ CA CO 4160.271. Memorial H. Wilson regarding improvements on land near Fraserburg.

- Letter from P.J. Poggenpoel to H. Wilson, 11th March 1867, about obtaining money from Messrs Henning & Smith to pay the Civil Commissioner, in which he admits not notifying Wilson that he must also pay the appraisers £10-5s-7d. Poggenpoel states that the farm is about 8000 morgen but is not yet measured [it was surveyed by Sam Melvill in March 1869] and is mostly of a mountainous nature well supplied with water for stock and even irrigating a garden and a little cornfield, say one or two bushels can be put in the ground.

On one side it is closely held by a government farm called Grootfontein, in the south by the surveyed government farm Banksfontein and in the north by two other government farms, Goega [Koega] and Tuinskloof.

The mountainous veld resists drought better than the plains but in summer months such mountainous veld is subject to *kruimpsiekte* [due to a poison found in some Karoo succulents].

The improvements as far as I can recollect are a house, an outbuilding, I believe to be a roundable [the term used at that time for a corbelled building], it is a circular building of stone built in the form of an arch and there is a piece of ground under cultivation partly enclosed by a stone wall.

- Letter from H. Wilson to the Colonial Secretary 24th April 1867 requesting assistance in reducing the amount paid for the improvements.

The agent [Poggenpoel] was instructed to bid for the farm at the auction of 10th January 1867, for a one year lease rather than run the risk of losing the whole season by waiting for the long leases to be put up in conformity with Act 19 of 1864 [Crown Land Leasing Act] which were likely to be postponed. The old “Bastaard” [Adriaan van Wyk resident at Grootfontein] living close by is very indignant that last year he paid £244 for the improvements, which are now valued at £122, half of what he paid.

Wilson said a fair price would be £30 for a wretched house, without doors or windows, six foot high, looking likely to fall down.

- In the memorial of 10th August 1869, Wilson states “that the kraal could have been built by any kaffir for £10 and that the hut and cookhouse and another small building, built of mud and stones, partially roofed without door or window, the most villainous apology for a habitation, the Divisional Council requested me to pay £122.” The memorial also mentions that the lease was held by W. Harvie until given up in 1867.

There was no reply to the memorial filed.

From this correspondence the following can be adduced.

The buildings extant on the farm in 1867 were the kraals on the hillside (Figure 7), the two-roomed house (Figure 5) and the corbelled building (Figure 6), and these were no doubt there when Adriaan van Wyk leased the farm in 1865. Whether the improvements were made by the first lessee, Daniel Johannes Theron, or if he made a profit in selling on what he discovered, is not known. There is evidence in the historical record of Basters building houses and corbelled buildings in the Kareebergen as early as 1845.

As the farm was vacant for two years, between Wilson and Harvie leaving in 1867 and

F.J. Jooste arriving in 1869, it seems that Wilson never recovered whatever he paid for the improvements. It is also unlikely that F.J. Jooste, who leased the farm for one year in 1869, would have made substantial changes.

As the square kraal (Figure 8) was not specifically mentioned by Poggenpoel, it was probably built after 1867. The *trapvloer* and *kafhok* (Figure 9) were almost certainly built by Johannes Daniel Moller who had the security of a 21 year lease.

We discovered a quarry in a kloof south of the buildings where stone for the house, corbelled building, small stock kraals, *trapvloer* and *kafhok* was sourced (Figure 10). The hillside kraals, the square kraal and the outlying kraals were constructed of boulders collected in the veld. However, there is a distinct difference in the construction of the square kraal to the others. The square kraal is better made, with walls built of boulders and with sedimentary rock used for the gateway. The other kraals are basically linear rock-piles without any corners.

A surface investigation was carried out and a midden was located south-east of the house. The ceramics found in the midden were typical refined industrial wares of the mid- to late-19th century (Figure 11). Who deposited the ceramics is uncertain. It was assumed that the majority came from the White lessees but investigations at another site, thought to only have been inhabited by Basters, showed traces of similar wares.

This survey of Moordenaarsgat is part of a larger project looking at the effect of moving the Cape border to the Orange River.

Thanks must go to Frans Jooste, the owner of Moordenaarsgat for his outstanding hospitality; to Pat Kramer and Judy Maguire for their invaluable input during a subsequent visit; Val Taylor for editing my scrawl; and the staff at the Cape Archives, especially the porters who deliver piles of records with speed and efficiency.



Figure 4. Corbelled building at the Paulsfonteinleegte outstation.



Figure 5. Remains of the square house.



Figure 6. Remains of what could have been the corbelled building.



Figure 7. Hillside kraal.



Figure 8. Square kraal.



Figure 9. Remains of trapvloer and kafhok.



Figure 10. Quarry.



Figure 11. Ceramics.