

# SECTION D

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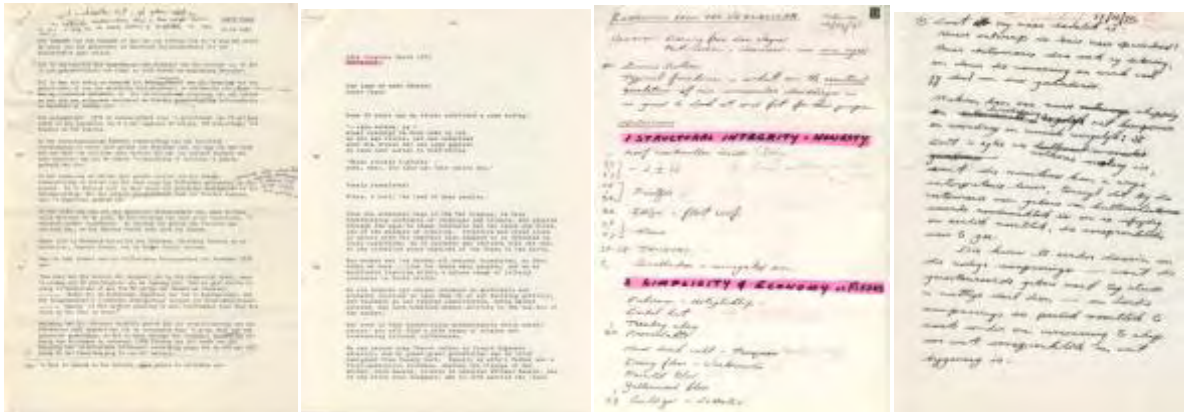
## EXPRESSION

**This section provides a formal analysis of Fagan's architecture and motivates and describes his design approach, mediations and typological responses.**

**The development of a heterotypological stance to the development of architectural form will be described.**

# Chapter 7

## DESIGN DERIVATIONS



Samples from Fagan's lectures (all Fagan archive)

This section describes Gabriel Fagan's design philosophies and attitudes towards the making of architecture:

Fagan's responses to the vernacular, the Modern Movement and regionalism will be outlined.

Fagan's co-development of a *fourth Cape vernacular* will be described.

His response to a mediated Modern Movement will be outlined as a *reflective* modernism.

Lastly, his *relative* regionalist approach will be explained.

Every landscape of any size or age has a style of its own, a period style such as we discern or try to discern in music or architecture or painting, and a landscape true to its style, containing enough of its diagnostic traits, whether it is in Appalachia or Southern California, can give an almost esthetic satisfaction (Trieb quoting Jackson, 1996:380).

Through his continuous search for appropriate local form, Fagan has 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 nature 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).

Barrie Biermann (1975:2) describes Fagan's approach.

*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].

### **7.1.Fagan and the inherited vernacular**

Chapter 3 outlined the development of a fourth Cape vernacular. Fagan has made a seminal contribution to the development and expression of a synthesis of the inherited tradition and Modern Movement influences. Fagan himself can be added to the list he cites below:

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).

His appreciation of the colonial vernacular slowly developed as he grew up in Cape Town.

### 7.1.1 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 the Pretoria University during Fagan's tenure. It supported a return to first principles but adopted a more place specific approach to the generation of architectural form. 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.

Here, an initial attenuation had begun as a reconciliation of tradition and Modern Movement principles that fostered the development of a fourth Cape vernacular. Encouraged by Barrie Biermann, the 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.

### 7.1.2 Fagan's attitude to the vernacular

Fagan's contextual upbringing in the Cape, his architectural education in a regional Modern Movement school in Pretoria, a twelve year stint with Volkskas Bank and his later conservation work sensitised him to an architecture of the authentic. He sees the value of tradition in its layered and accretive nature:

Unlike a vase in your Museum collection, a building is a vessel that generally grows and changes with the times – this very growth pattern adding immensely to the interest, especially of vernacular architecture (Fagan, 1977a:5).

Fagan's stance on the socio-cultural importance of tradition is clearly outlined in a lecture entitled "Conservation for all: Our Common Heritage", delivered at the Standard Bank National Arts Festival in 1992:

Given the historic differences between the English, Afrikaans and black experience, and now with the rapid urbanization with resulting acculturation and loss of traditional values, tensions are very deeply rooted and the development of a shared sense of history, which must support such a common patriotism, clearly remains a daunting task. But certainly not insuperable, as we already have more common values in our shared love of this country than we care to admit. And the extent to which our cultures and language do differ, need not be seen as an obstacle, but with faith, goodwill and imagination can provide an enrichment. This is already so evident in our exciting music, our art and in our theatre. Equally our buildings both single and grouped, the

field that interests me as an architect, are highly visible and can either serve as rejected symbols that foster division, or contribute to a common national pride (Fagan, 1992a:1).

This is further reinforced in a lecture on the Castle of Good Hope in Cape Town in which Fagan remarks:

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, 2002a:1).

He also understands the importance of the processual nature of the vernacular.

Vernacular architecture all developed organically and over a period of time, prescribed by available materials, climate, and way of living of the builders ... This developed into tradition, people building unquestionably as their fathers before them, making only small individual adaptations (Fagan, 1969:1).

In *House, Form and Culture* Rapoport (1969:5) 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 an unreferenced presentation at an architectural exhibition in George in the southern Cape, Fagan (1982:3) uncannily concurs when describing traditional building:

A lack of aesthetic pretensions, working with the site and with a respect for others and their houses. Above all, the type of house was fixed by tradition; so that all great-grandfather had to decide was the particular requirements only, as determined by family size and wealth.

Fagan (2011a) indicated during a personal interview that he was aware of the writings of Rapoport and that he possessed all of his publications. It also seems that Fagan must have met him at the 1983 Architectural Conference on Regionalism at the University of Cape Town, as articles by both are published in the *Architecture South Africa* of September/October 1983. The similarities in descriptions of the vernacular are probably conscious linkages to those of Rapoport but are synergised with Fagan's practical experiences. Whatever the source, Fagan has certainly developed these approaches in his work and made them his own.

Buildings were fit for their purpose, adapted to the climate, to the available technology and to the culture and they were all built without architects. In fact there has been a tremendous resurgence of interest in these indigenous or vernacular buildings, or as Bernhard Rudofsky called his book on this kind of architecture in "Architecture without Architects" (Fagan, 1982a:1).

In his Sophia Gray Memorial Lecture Fagan 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, 1991b:10).

### 7.1.3 Fagan's responses

Fagan's work is influenced by the inherited vernaculars of the Cape region through a traditive 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". Fagan also understands that a reinvention of the 'architectural wheel' is not necessary. He concurs with Mumford who warned

... that invention could "become a duty" and that, like a child delighted with a new toy, we may lose sight of the guidance that must come from "critical discernment" (Speck, 1987; 2007:49).

In one of Fagan's most important lectures, "Regionalism" he (1985:2) refers to the approach of Japanese architect Kenzo Tange<sup>187</sup> (1913-1925) to tradition as being catalytic. A new architecture is created in such a way that the original influence is undetectable. Fagan notes (1996:5) that Biermann 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.

Fagan imbues his architecture with new meaning in a similar, yet less scenographic and post-modern way. Venturi (1988:38) defines this approach as a vestigial architecture which is the "result of a more or less ambiguous combination of the old meaning created by the modified or new functions, structural or programmatic, and the new context" and that a change in context creates a change in meaning (1988:43).

Fagan's responses to the vernacular alternate between replicative and interpretative oppositions, building mainly on the principles and plasticity of the first Cape vernacular. This approach reinforced by various lectures that he has given over the years (and the slides which support them), his detailed conservation work on many original Cape buildings, and his development of a set of ten principles entitled "Learning from the Vernacular" (see detailed explanation in Chapter 7.1.6).

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– <sup>187</sup> See Appendix J.

Fagan's approach moves seamlessly between oppositions of the rational and the corporeal, familiarity and strangeness, and new and old. He uses aspects of context, program and technology as well as elements of the Modern Movement and vernacular formal palette to interpret and attenuate these oppositions. There is never a complete synergy of the oppositions but rather a solution in constant formal tension. As Colquhoun (1997; 2007:145) remarks:

The relationship between industrialization and traditional cultures and techniques is not one in which they become organically fused with one another, as Le Corbusier implied, but one of hybridization, where different cultural paradigms, detached from their original contexts, co-exist in a pure and unstable form.

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. Here Fagan's childhood mediations of hand and mind bring their influence to bear. Most of Fagan's houses rely on an interpretation of the singular vernacular object while the internal spatial typology is that of the central room with side rooms as seen in the first Cape vernacular. The houses are in stark contrast to those of Fox and Pahl, as they limit the reliance on passageways, reinforcing their linkage to the first vernacular, as opposed to the British influence (the second vernacular) which resulted in organizations dominated by circulation.

Fagan (1985:1) also notes the importance of form as an architectural generator modifying other factors.

But climate, available materials or technology, are far from being the only or even the prime determinants of built forms. Rather, form is the result of a whole range of socio-cultural factors, with climate, materials and technology seen as modifying only. The importance of a cultural factor such as tradition in the choice of form is well illustrated in our local use of North European pitched roofs and Mediterranean style flat roofs, standing-cheek by jowl, both using the identical corrugated iron as a roofing material.

Fagan's development of a set of principles learnt from the vernacular has created a discipline for the design process in much the same way that his hero, Le Corbusier did.

The vernacular model provided a way to master the process: as we have seen in the case of Le Corbusier, it provided a conceptual structure for integrating the new ideas and "facts" into the discipline of architecture, and for broadening its vocabulary and responsibilities (Passanti, 1997:447).

In a similar way, Paul Rudolph (1957:19) called for visual ties such as colour, scale and texture and the use of recurring features such as shutters to find a new expression.

#### 7.1.4 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.

##### 7.1.4.1 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. The principles are dominated by formal strategies, with only two aspects touching on the experience of the human being. These are also biased towards a visual design approach. Although Fagan's architecture uses these intellectually driven approaches, corporeal design strategies act as counterpoints. These can be seen as elaborations on the principles of a "progression of experience" and "human scale". 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 Die Es<sup>188</sup>. 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. 7.1). 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.

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— <sup>188</sup> The circulation path into and through the house is more clearly described in section 7.6.1.10 "Progression of experiences".





**Figure 7.1.** Left: Steel framed timber platform at the junction of living and entrance hall at Die Es (1965) (Fagan, 2012b). Right: Similar platform at junction between passage and main bedroom at House Keurbos (1951) (Author, 2008).

#### 7.1.4.2 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. Lefaivre and Tzonis quote descriptions by both Goethe and Proust of how buildings can evoke the past in the midst of the present. Goethe explains:

... how past and present become one through design triggers, how "all these things" (of "German origin"), old objects or new ones designed "in the same spirit ... in form and colour" direct "imagination back upon old times", and how they bring spectators into such a state of vivid remembering and familiarity with the object that they "ask themselves whether they really were living in a modern time, whether it was not a dream" ... "gazing ... towards ... a region ... (of) a vanished golden age" (Lefaivre & Tzonis, 2003:16).

Proust concurs:

Buildings can bring into the present the actual hour, a little of the past, they can "interpose in our present" ... "By 'overexciting' the mind "a little" they can raise the past "familiarly" in the "midst of the present." Through "a kind of illusion" (buildings) can make us "see a few steps ahead" that which is "actually situated back many centuries ... a ghost from a buried past ... yet there ... present among us now, in the sun." (Lefaivre & Tzonis, 2003:17).

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) (see Fig. 7.2) and House Visser (2011) in Langebaan (unbuilt) (see Fig. 7.2). 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. 7.2). In Houses Swanepoel in Hermanus (1990) and Beyers (1998) in Betty's Bay (see Fig. 9.19) the flue rises through a glazed roof connection where structural logic is almost defied, allowing the flue to read as an independent element<sup>189</sup>.



**Figure 7.2.** **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

— <sup>189</sup> See Chapters 7.4.3 and 10.4.4 for further descriptions of chimneys.

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. 7.2). 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.

#### 7.1.4.3 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. 7.3). 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. 7.19) 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. 8.10) has a central living space framed by cellular bedroom spaces on western and eastern edges.

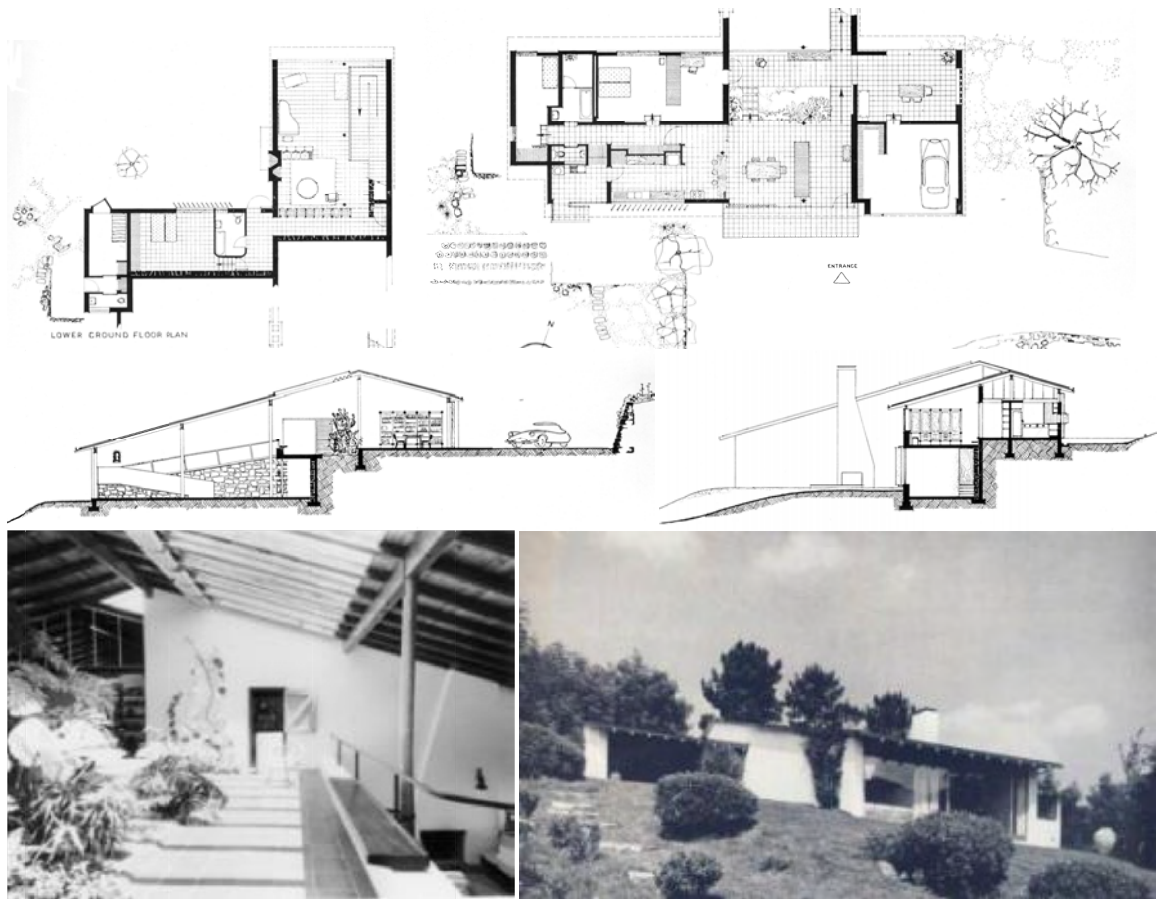




**Figure 7.3.** **Previous page left:** Glazed fanlight to passageway at House Levin (1969) (Author, 2009). **Previous page middle:** Frameless top glazing to door at House Raynham (1967) (Author, 2008). **Previous page right:** 'Frameless glazing' to western edge of living room to House Patterson (Author, 2008). **Above:** Glazing between roof rafters to House Blommaert (1982) (Author, 2009).

### 7.1.5 The houses

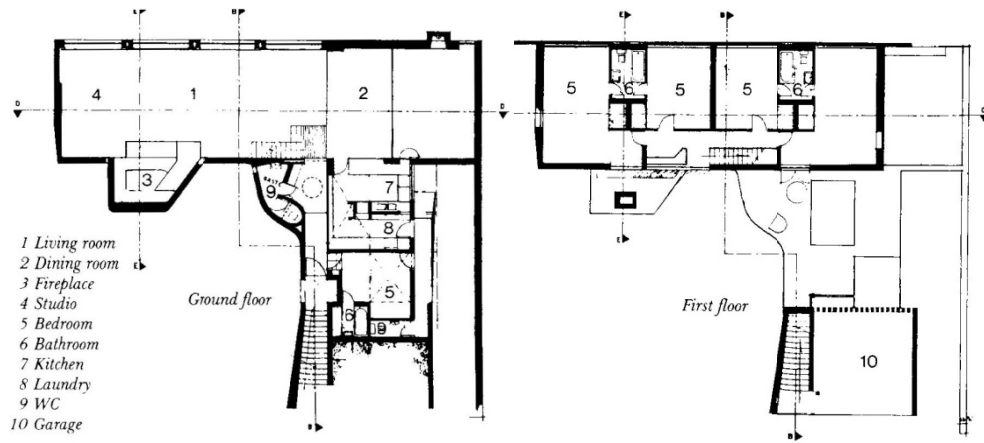
House Keurbos (1951) (see Fig. 7.4) is a seamless synergy between the first Cape vernacular and the ramped circulation route of Le Corbusier's Errazuris house in Chile. Fagan relies on the nature of the vernacular as singular object in his new creation, collapsing all accommodation, even garage and servant's quarters, into a single whole. The introverted nature of the vernacular form is, however, countered by the entrance, living and circulation volume which release both outwardly and upwardly to create spaces that hover between indoors and outdoors, all with a controlling and sheltering roof form. The replicative nature of the fireplace anchors the house in height and position, but its functional nature is reinterpreted to serve both inside and outside spaces. The tightness of vernacular form shifts to accommodate elements that extend or become layered onto the main form through the addition of an organic niche at the midpoint of the ramp, the extended window to the maid's room and the adjustable shutters. These counterpoints hint at an attitude towards plasticity beyond surface treatment that would later inform the making of entire form.



**Figure 7.4. Previous page:** House Keurbos (1951), Bishopscourt, Cape Town, lower ground and ground floor plans (Fagan archive). **Top:** Sections (Architect and Builder, November 1959:38). **Bottom:** inner court (Fagan archive) and view from garden (Architect and Builder, November 1959:34).

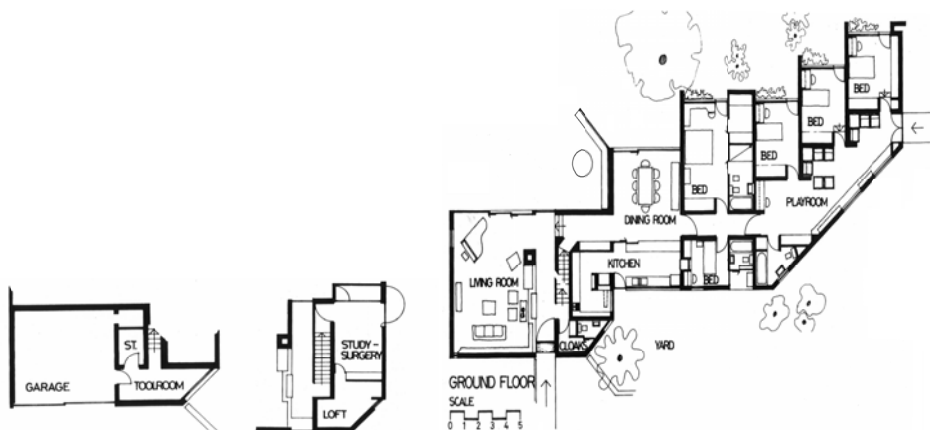
Fagan's own house, Die Es (see Fig. 7.5), is a mediation between the functional rationalism of the Modern Movement and the formal plasticity of the singular Cape dwelling. It includes replicative features such as the chimney which becomes a winter room through its extended dimensions. The shutters of old become louvers that hover over glazed openings while west-facing windows are protected by sliding screens. A play between organic and regular geometric forms further enhances the dialectic and a Cape ambience is affected through the roughly plastered white-painted walls, quarry tile floors and timber syncopated roof. The architectural promenade is used to hide and reveal the sea view beyond.

Arriving from the street you cross the rough paving of granite and sandstone typical of Camps Bay, and enter under cover where the post box and light above reflect the proportioning system used throughout the whole design. A glimpse of the sea beyond is caught through the brick grille backing the carport, and a simple railing leads you down the curved steps of Table Mountain sandstone. The steps narrow down (echoes of the Scala Regia rather than the Cape) to a landing that serves as a wind lobby and from where a fresh view of the chimney is obtained (Fagan, 1985:13).



**Figure 7.5. Top:** Die Es (1965), Camps Bay, Cape Town, ground and first floor plans (Fagan archive, undated). **Bottom left:** Die Es (1965), Camps Bay, Cape Town, road view looking West (Fagan archive, undated). **Bottom right:** view from the West (Author, 2008).

In House Raynham (see Fig. 7.6) Fagan reinterprets the plastic quality of the vernacular by moulding the entire built form. The chimney shifts to an internal position attached to a supporting concrete roof column. Few replicative elements remain save for the stable type doors to the bedrooms and the wall/window proportion on the street edge. Tectonically there are connections to the vernacular through the brick floors, bagged and painted walls and timber ceilings.





**Figure 7.6. Previous page:** House Raynham, Newlands, Cape Town (1967), lower ground, first and ground floor plans (Fagan archive, undated). **Top left:** Approach view (Fagan archive, undated). **Top right:** Interior view of children's playroom (Author, 2008). **Bottom:** View from garden (Author, 2008).

### 7.1.6 Learning from the vernacular<sup>190</sup> – ten lessons

In a lecture given in 1996 entitled “Learning from the Vernacular”<sup>191</sup>, 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. It is not the singular nature of these aspects that permeate Fagan’s work but the new relationships that he establishes through internal and external tensional conditions in new or conservation work. The internal condition refers to the new relationships he establishes between his principles, while the external condition refers to their relationship to aspects of the Modern

– <sup>190</sup> Fagan refers to “Learning from Las Vegas” as a subtitle to his 1996 lecture at the then Cape Technikon (now Cape Peninsula University of Technology). This ‘tongue-in-cheek’ remark probably disguises a direct connection to Venturi’s critique of the late Modern Movement. Fagan has certainly striven for an architecture of ‘complexity and contradiction’ set against the oppositions of simplicity and consistency.

– <sup>191</sup> This lecture was based on an earlier, more limited description presented at the April 1983 Architectural Conference in Cape Town. The 1983 paper mentions another principle namely ‘a progression of experiences’. In 2012 Fagan based his lecture series in Mexico on the earlier paper.

Movement and the oppositions noted previously. These approaches underpin the vernacular as source of design inspiration.

To speak of inheriting and extending a tradition does not mean copying what has gone before, or enforcing stylistic norms. It rather implies the absorption of principles behind earlier solutions and their transformations to meet different conditions and fit new intentions (Curtis, 1996:619).

Fagan (1983b:4) notes that these underlying principles are sometimes merely usages that have been absorbed rather than consciously articulated, and that a post-rationalisation of their impact may be missing the mark. The ten principles are:

#### **7.1.6.1 Simplicity and economy of means<sup>192</sup>**

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

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– <sup>192</sup> In an April 2012 lecture, at the Cape Peninsula University of Technology, Fagan notes that 'Simplicity' is, for him, the most important vernacular influence.



perform more than one function. The foyer to his parents' house in Newlands not only merges internal and external conditions (see Fig. 7.7) 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. 7.7).



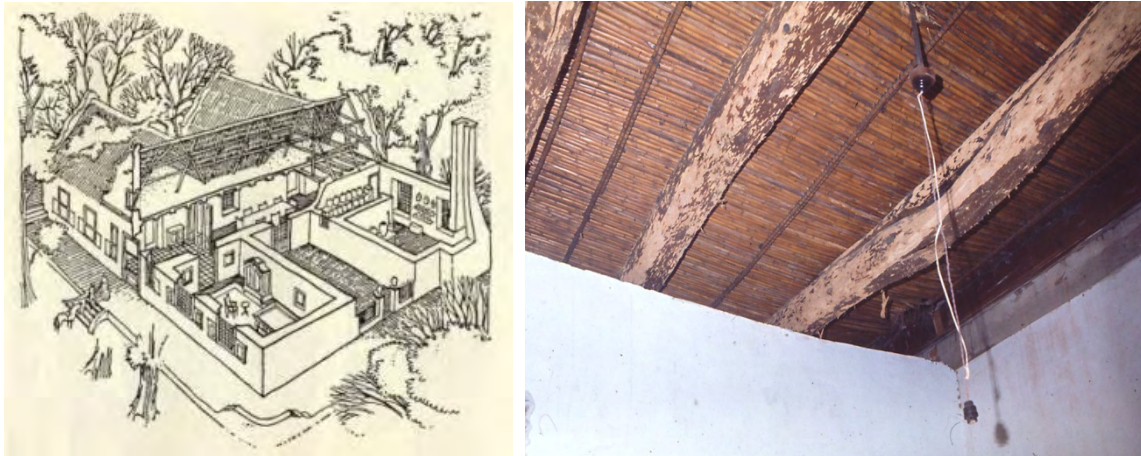
**Figure 7.7.** Left: Foyer and dining area of House Keurbos (1951) flooded with light from glazed roof over (Author, 2008). Middle and right: Steel roof collars to House Beyers (1998) and House Swanepoel in Hermanus (1990) act as roof and flue supports (Author, 2009).

Fagan also states that an understanding of the principles of simplicity and an economy of means

... are inherent qualities if your materials are won by the sweat of your brow from the barren Tanqua Karoo, or hacked from the very limestone on which your walls will rise (Fagan, 1996:5).

#### 7.1.6.2 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. 7.8]. The heavy walls following Portuguese practice rather than that of the fatherland, are built in a T or U or other configuration allowing a room width not exceeding some 6 metres to accommodate the generally available ceiling joists [see Fig. 7.8] that would allow the characteristic and ingenious *brandsolder* to separate the contents of the house from the highly flammable thatch covering on rafters and rough hewn pegged principal trusses. 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 7.8.** Left: Biermann's sketch (to which Fagan often refers) 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, 2012b).

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 7.9). 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 7.9).

The change over in the colonies from Dutch methods of construction to Portuguese was probably facilitated by the adoption of the Classicist style in Holland. The Italian designers who produced the pattern books from which the Dutch derived their knowledge of the style, worked in a building tradition which may be loosely termed 'Mediterranean'. It is characterised by heterogenous and usually inferior material for walling, protected by a layer of plaster and often whitewashed (Biermann, 1960:27).



**Figure 7.9.** 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).

### 7.1.6.3 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).

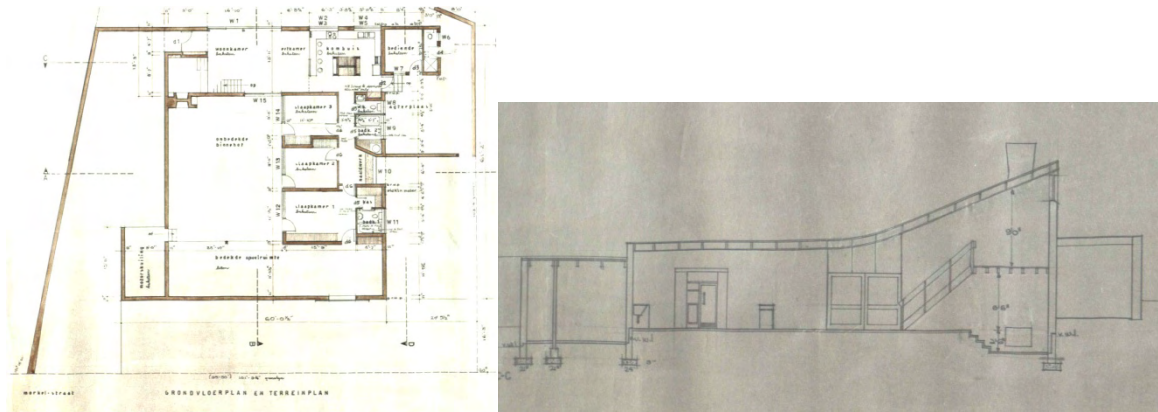
In a personal interview (2008c) Fagan reiterated his admiration for the soft moulding of plaster, admitting that it has had a great influence on his work. But it is the effect of light on the walls that defines the plasticity. In a 1969 lecture “Architecture and your home” (1969: 4), Fagan quoted the words of Alice Meynell and her essay on shadows:

... while the while the shadow walks with the earth. It alters as the hours wheel.

Fagan uses this quality to counter the tectonic monotony of many Modern Movement solutions in accordance with Paul Rudolph’s (1957:19) critique of the Modern Movement architecture of his time:

All too often in our current work a feeling of plasticity is lacking, but this is not inherent in the concept of the enveloping form. The Villa Savoye proved that many years ago. Anyone who has ever walked up its great ramp and experienced its unfolding qualities and changing vistas would agree that a box can have never ending interest.

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. 7.10) displays the same restraint in plastic articulation, but hints of plasticity can be seen in the curved junction of the living room roof.



**Figure 7.10.** Left: Plan of House Patterson (1966) (Fagan archive - Job No. 655, undated). Right: Section through House Patterson (1966) (Fagan archive - Job No. 655, undated).

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. An in-between condition can be seen in the barrel vaulted structures that have either been built or proposed (see Fig. 7.11). The first was at Ida's Valley (1975) in Stellenbosch, where Fagan designed new workmen's houses:

I resorted to building in the traditional brick vault fashion not only because of its plastic qualities in relation to the existing buildings, but because of its inherent soundness as a cheap, common sense and almost indestructible form of building (Fagan, 1983a:6).

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<sup>193194</sup> (1925-) and a few ship-like door openings, once again to bathroom areas.

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— <sup>193</sup> See Appendix J.

— <sup>194</sup> Fagan argues (2012) that it is his experiences in the Algarve in 1988 that were the inspiration but the similarities in form tell another story.



**Figure 7.11. 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).

House Van Zyl (see Fig. 7.11), 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.

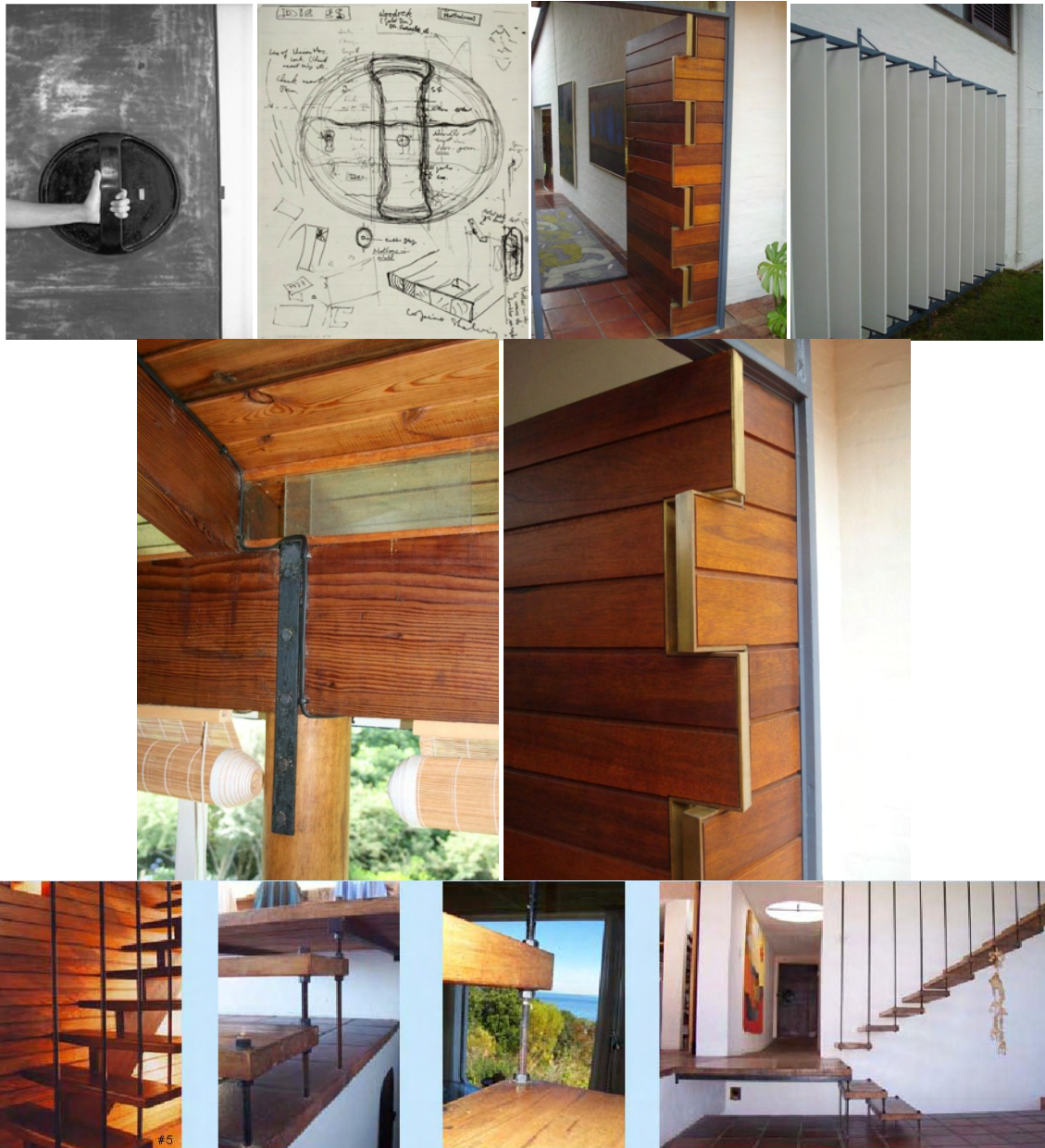
#### 7.1.6.4 Appropriate and consistent detailing

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. 7.12).



**Figure 7.12. Top:** Continuity of hinge detail in various Cape vernacular doors (Fagan, 2012b). **Bottom:** Sophisticated detailing of wall cupboard in Cape Dutch homestead and simple clock niche in vernacular house (Fagan, 2012b).

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. 7.13). 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. 7.13).



**Figure 7.13.** **Top left:** Front door handle to Die Es (Fagan, 2012b). **Second from top left:** Fagan sketch of front door handle (Fagan, 2012b). **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) (Photo's 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, 2008c):

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 covered 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 (see Chapter 6). 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. 7.14).

I started the plane in 1992, but lost interest when my hired assistant Linea, who claimed that she had worked for Boeing, incorrectly hot-wired [it] and as a result destroyed most of the foam and spoilt the canopy by also cutting it wrongly (Fagan, 2011b).



Figure 7.14. Unfinished plane in the basement of Fagan's office (Author, 2009).

#### 7.1.6.5 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<sup>195</sup>. 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. 7.15). It took Fagan quite a while to have this and a blue colour (in contrast to the required white) accepted 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 7.15.** Fagan and his wife on the terrace of their House *Paradys* (2003) on the left. The house sits comfortably with its rather ostentatious neighbours and forms a unity with in diversity (Photo courtesy of Du Plessis, 2004).

#### 7.1.6.6 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. Fagan's hero Le Corbusier was largely influenced by the simplicity of this architecture and as Passanti (1997:438) remarks:

In Romania and Tirnovo [Le Corbusier] was struck by the bright color scheme of the houses, repainted twice a year in brilliant white with accents of sharp blue.

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

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– <sup>195</sup> John Rushmere (see Appendix J), once head of the Nelson Mandela Metropolitan University's Department of Architecture also designed an award-winning house in the same area and under the same restrictions. His more historicist Post-Modern project uses a series of stepped rectangular thatch-roofed boxes with a peripherally located architectural promenade.

boats were painted with greens, blues and reds such as on Mostert's Mill<sup>196</sup> 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. 7.16), all of which are located on or near the sea. The only exception is House Beyers (see Fig. 7.16) 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. 7.16) of the roadside facing and partly submerged courtyard. Here Fagan expresses a connection with earth.

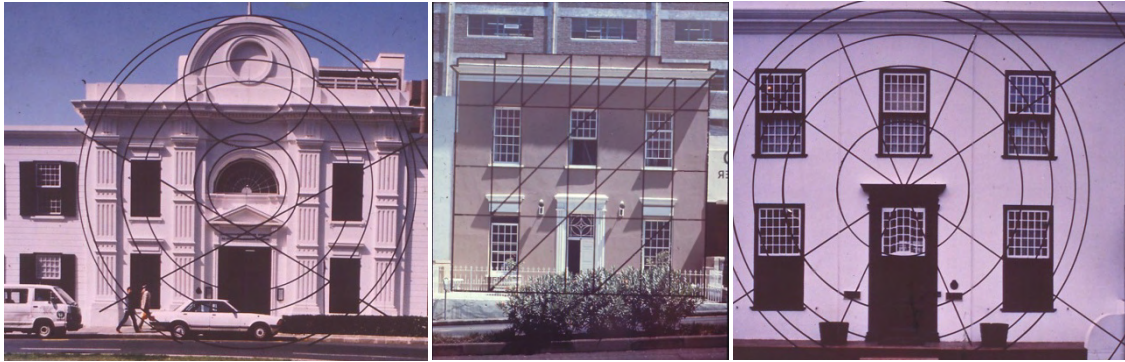


**Figure 7.16.** **Left:** Courtyard to House Paradys (2003) (Author, 2009). **Middle:** Green and blue hues to doors at House Swanepoel in Cape St. Francis (1980) (Photo courtesy of Pierre Swanepoel architect, 2012). **Right:** Green and brown hues to House Beyers (1998) (Author, 2009).

#### 7.1.6.7 Proportion (relation to the whole)

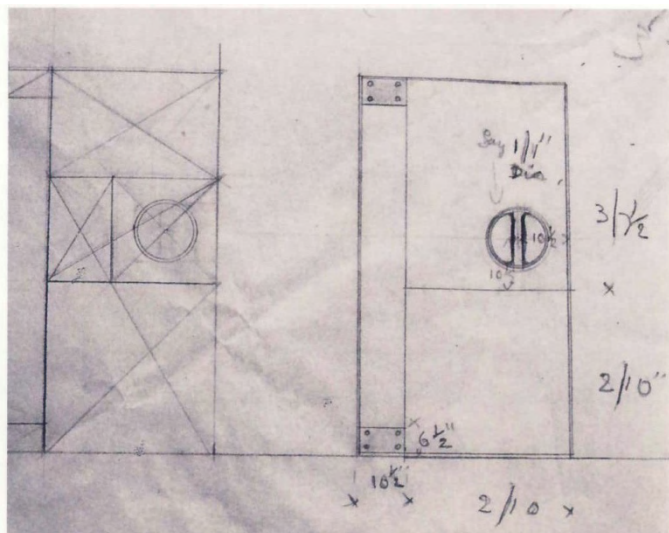
Fagan notes (1985:8) that the better Cape Dutch buildings were designed according to two types of proportional systems: either the concentric scheme or a system of squares and double squares (see Fig. 7.17). He suggests that these systems provide a sense of order and dignity to the buildings but that their use today is rather limiting.

— <sup>196</sup> Mostert's Mill is a small farm windmill built around 1796 in Mowbray, Cape Town (<http://mostertsmill.co.za>. [Accessed 16/04/2012]).



**Figure 7.17.** Lewcock's proportional systems placed over various Cape Town Cape Dutch buildings (Fagan after Lewcock, 2012b).

Fagan has used the Hambidge<sup>197</sup> 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. 7.18). 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 7.18.** Proportional layout for door to Die Es (1965) (Fagan, 2005b: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. John Rennie (2012a) who worked for Fagan in the 1960s comments:

Also Gawie's admirable proportioning modular system was designed much for his own

– <sup>197</sup> *The Practical Application of Dynamic Symmetry* was written by Jay Hambidge in 1932. The author has located Fagan's original 1949 copy in Pretoria, it having been passed on by a teaching colleague, Derick de Bruyn, whose father-in-law Johannes Jacobus Janse van Rensburg had been a classmate of Fagan's.

stature and spartan habits - e.g. no baths bigger than 5'6" (1700) - "anders gaan jy mos verdrink" [otherwise you will drown], compact loos, counters and basins usually 2'10" high = 864mm max whereas after Gawie I advanced to more like 900 or even 900+ for certain kitchens etc!

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. But the orderliness of the Cape vernacular farm layouts has provided Fagan with valuable lessons for design:

I try to relate all elements to enhance each other and unify the design. Car designs are a good study in this regard, and Henry<sup>198</sup> and I will often analyse a new car in this respect (Fagan, 2008e).

#### 7.1.6.8 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).

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. 7.19). 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. 7.19). A human scale is achieved in the circulation routes by using light, sun, view and dimensions to define them.

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— <sup>198</sup> Fagan's son.



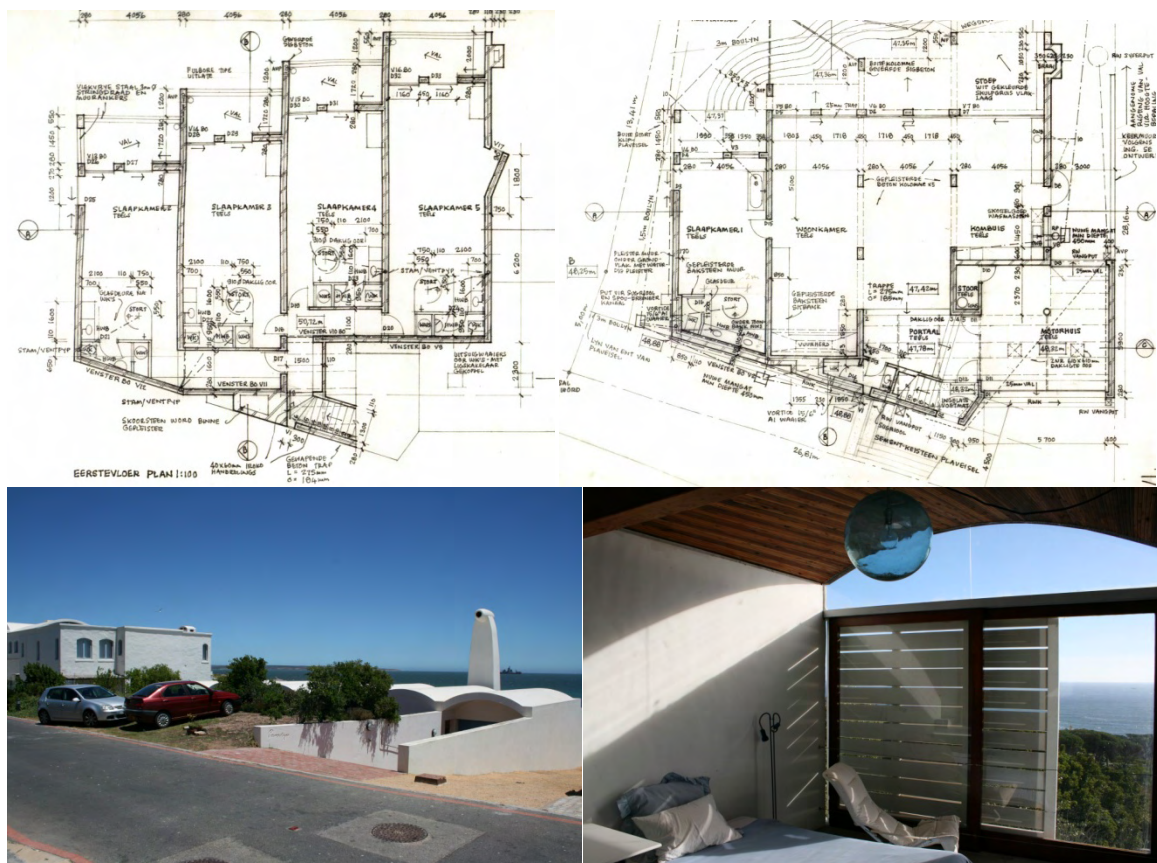
**Figure 7.19. Top:** Boundary walls merge building with landscape at House Swanepoel in Hermanus (1991) (Author, 2008).  
**Bottom:** Plan of House Swanepoel Hermanus showing tight service and generous living spaces (Fagan, 2005a:103).

In House Blommaert in Stellenbosch (1982), the circulation routes are defined in a different way to accentuate their function (see Appendix F, 13.6.13 for drawings). The internal route from living to bedroom areas is more intimate but widens to form a worktop space. The other passageway leads to a more secluded environment and is fully glazed on one side with gentle treads. The space merges internal and external spaces and reinforces the transition from living to sleeping areas. The height of the enclosure and exposure to the sun create an evocative and appropriate human scale.

### 7.1.6.9 Relation to the environment

Fagan (1983:4) 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. 7.20). A limited accommodation schedule was certainly beneficial in this regard but the same approach can be seen in House Brink (2002) (see Fig. 7.20) where a large volume is disguised by using the slope of the site, with only one level being exposed to the road.

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. 7.20).



**Figure 7.20. 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 its high level views to the sky and distant focus on the Atlantic sea (Author, 2008).

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.

#### 7.1.6.10 A progression of experiences

Fagan cites the importance of the experiential route of the Groot Constantia<sup>199</sup> estate where an avenue of trees defines the path to the manor house (see Fig. 7.21):

Passing through the original gates ... the wall on the left hand side is broken to provide a glimpse of the Muizenberg Mountains before you continue past the Jonker's house on the right hand side, up to the imposing front gable presided over by Constantia herself. The eye is then directed to the right, where after a quiet walk up the narrow oak avenue, the secluded bath is reached. Returning down the avenue and through the house, the eye is immediately swept beyond the rear court to the wine cellar and its joyful Anreith gable truly worthy of the gods for whom Ganymede pours his nectar (Fagan, 1983b:5).



**Figure 7.21.** Approach up the avenue of Oak trees to Groot Constantia (Author, 2007).

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

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– <sup>199</sup> Groot Constantia refers to a wine farm in the Cape Peninsula first granted to Simon Van der Stel in 1685. The entrance way to the manor house is lined with a long lane of oak trees and is also defined by a series of linked service buildings on one edge and a werf wall on the other (<http://www.grootconstantia.co.za>. Accessed 16/04/2012).

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<sup>200</sup>. 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.

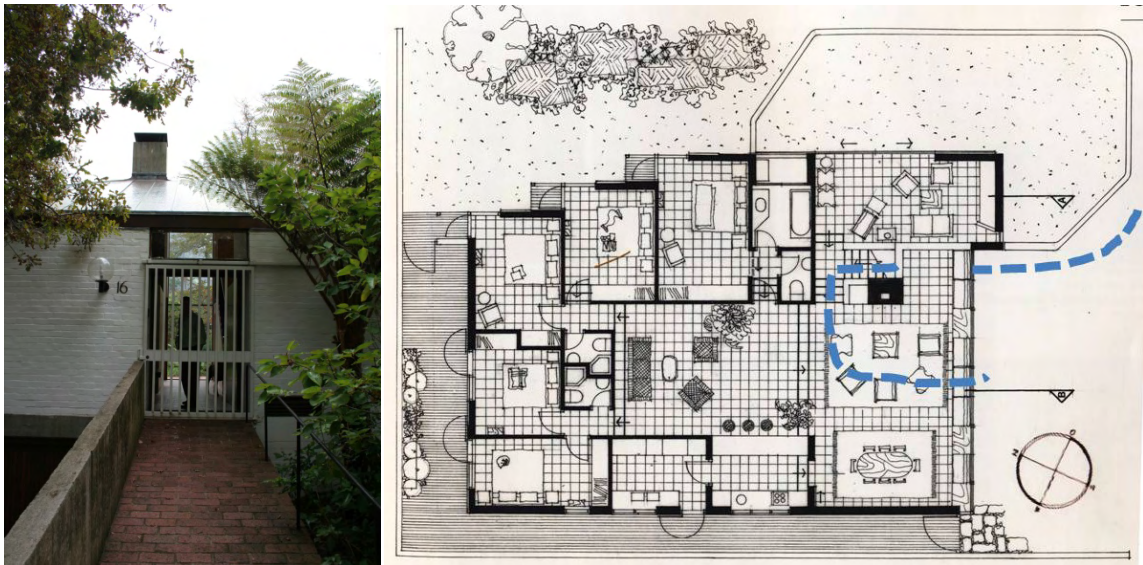
House Raynham in Newlands, built in 1967, uses an abbreviated experiential route which focuses on a peak of the Table Mountain range. A gentle suspended ramp guides the visitor to the solid front door. On entry a narrow passageway focuses movement towards a floor-to-ceiling window. As the visitor moves closer, the view of the mountain is revealed (see Fig. 7.22).

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. 7.22). 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.

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— <sup>200</sup> Kloof Nek is a saddle in the Table Mountain range that allows access from the city bowl to the Atlantic seaboard suburbs to the west.





**Figure 7.22.** 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, 2005a:103).

### 7.1.7 Summary

The lineage and development of the Cape vernacular tradition is important in the history of architecture in this country. This chapter has illustrated the influences on the inherited vernacular over time and has argued the development of a fourth Cape vernacular by architects such as Fox, Pahl and Fagan. 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 heterotrophic architectural responses that alternate between the rational and the corporeal, familiarity and strangeness, and new and old.

The influence of the Cape vernacular has continued over the years. Theron (1973:1) writes that the study of the vernacular in South Africa became popular in the 1970s with the publishing of Rudofsky's book *Architecture without Architects: an introduction to nonpedigreed architecture*. In the 1990s and 2000s a new generation of architects (see Fig. 7.23), such as Piet Louw and Martin Kruger, began to reinvent the Cape vernacular tradition. In 2008 Van der Merwe Miszewski Architects also synergized neo-Modern Movement dictates with the Cape vernacular in their Weylandt and Newlands houses. The authenticity of the Cape vernacular lives on.



**Figure 7.23. Top left:** Constantia Town Hall, court edge onto parkland, Cape Town, Piet Louw architect (Architecture SA, May/June 2005:32). **Top right:** Nieuwe Sion, approach view, Stellenbosch, Cape Town, Martin Kruger architect (Leading Architecture, November/December 2002:33). **Bottom:** House Weylandt, Franschhoek Valley, Cape Town, view and plan, Van der Merwe Miscewski Architects (Architecture SA, November/December 2008:32,33).

## 7.2. FAGAN AND THE MEDIATED MODERN MOVEMENT

(A mediation between programmatic modernity and regional sensibility).

Discussing architecture and true architecture is more than superficial form – so when I refer to an International Architecture, refer not to the "International Style" of this Century, but to the notion of a Universal Architecture, or as Corbusier put it: "We refer only to those who understand the social role of architecture, not to those who practice modern architecture as a fashionable hobby" (Fagan, 1972:1).

Fagan's domestic architecture is a mediation between the orthodoxy of pastoral modernity, the initial (perhaps naive) programmatic modernity espoused by the youthful enthusiasm of the Transvaal Group in the early 1930s, and the later regional-modern expression of the Pretoria School. It is a mediation of definitions of the modern that refer to contemporaneity and transiency. Its formal and spatial nature, although timeless, borders on a counterpastoral view of modernity, as Fagan's approach has not changed much over time and the tenets of functional orthodoxy remain. The core constituents of his architecture are a functional and pragmatic approach influenced by Le Corbusier and the mediated regional approach to the Modern Movement through Fagan's education at the University of Pretoria. Fagan's response was formed through an already established recognition of the limitations of Modernist orthodoxy, as the failures of the Transvaal Group's orthodox architecture were apparent early on. It was the task of the new breed of architects to attend to these problems while aligning themselves with functionalist viewpoints to establish new ways of living in response to climate, place and materials.

### 7.2.1. Fagan's Modern Movement influences

In his architecture Fagan expresses certain approaches to Modern Movement spatial typologies and its mediations. Various influences can be detected in his buildings. These alternate between original Modern Movement intentions, Mediterranean inflections and Transvaal mediations.

#### 7.2.1.1. Le Corbusier: Orthodoxy and Mediterraneanism

But the basic stuff of architecture is also Martienssen's related volumes, defined by Corbusier's mass, surface and plan. Barrie Biermann and I were once pondering the contorted surfaces of a new building. After a long silence, he said in his laconic way "Be thankful that we were taught in a more disciplined time." And I am truly thankful, because the cubist discipline taught the basic stuff of Architecture – the Villa Savoye has to precede Ronchamp (Fagan, 1991b:10).

Le Corbusier's canonical five point plan set the tone for the discipline of Modern Movement

architecture. Its typological lessons were clear: the plan as generator, the separation of structure and enclosure, and economy and efficiency in planning. These tenets form the core of Fagan's disciplined approach to the making of architecture that in its own right creates a new typological but less canonical approach. But Fagan (1977b:5) recognises a dialectic in Le Corbusier's work:

Certainly the most seminal writing after Corbusier's "Towards a New Architecture" is Venturi's "Complexity and Contradiction in Architecture". And the principles certainly needed restatement, because they have always been present in the best work, including Corbusier's own (Fagan, 1991b:10).

Although Fagan remembers (Steenkamp, 2003:8,9) that they, as students, thought Le Corbusier had 'lost the plot' with the design of "La Chapelle de Notre-dame-du-haut" at Ronchamp (1955), Fagan developed a further, more subtle affinity with Le Corbusier's architecture through a mutual admiration for the traditions of Mediterranean architecture, derived from his respect for the traditions of Cape architecture. This typology is biased towards heavy wall construction that "the Dutch learnt from the Portuguese in the typical Mediterranean use of the rubble or soft-brick wall, protected by lime plaster" (Fagan, 1977b:5), while "the heavy walls following Portuguese practice rather than that of the fatherland are built in a T or U or other configuration" (Fagan, 1985:6).

Fagan recognizes that the properties of thermal mass offered by this type of construction makes it suitable for the Cape and that a tempering of Modern Movement 'lightness' is required. Here his work finds synergy with the buildings of the Portuguese Mediterranean architect Alvaro Siza through manipulations of the white plastered wall. Fagan's work also aligns with Pancho Guedes's reinterpretation of Portuguese architecture through the use of the flattened barrel vault and exaggerated chimney. Fagan documented these elements on his 1955 visit to Lourenço Marques. Fagan's barrel vaulted roofs also recall those on the Cape farm Meerlust (Fagan, 1985:6), Le Corbusier's Maisons Jaoul and Guedes's Smiling Lion in Maputo.

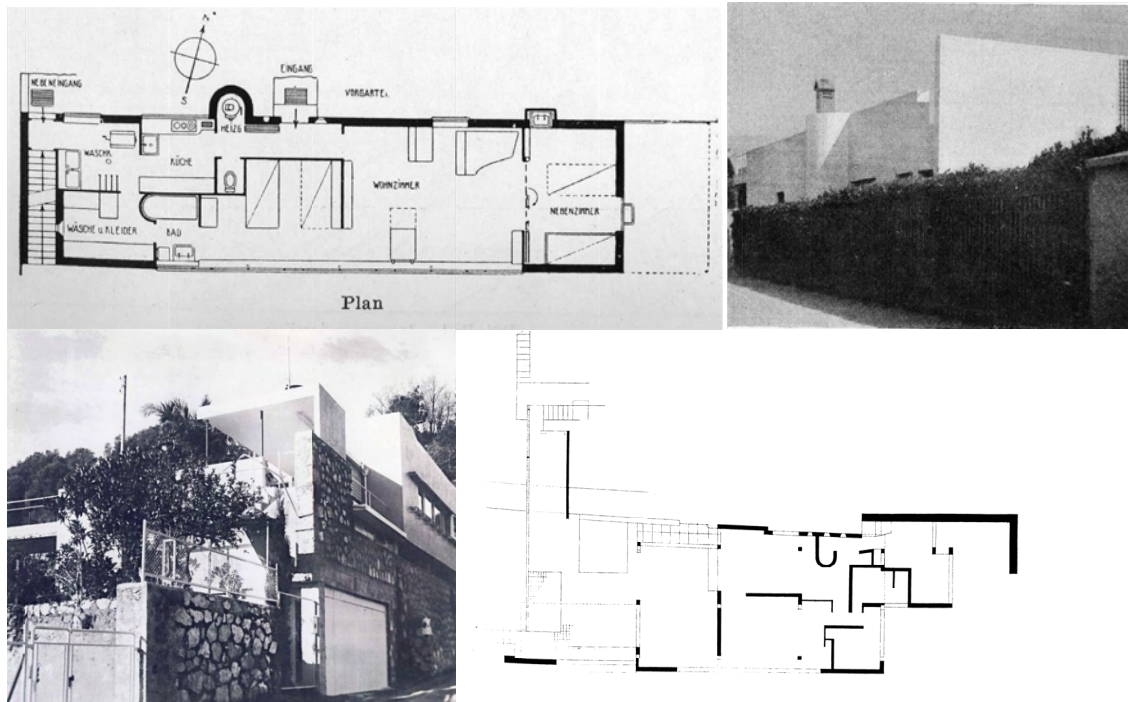
Fagan has therefore not only responded to the orthodoxy of Le Corbusier's work but has also recognised his latent vernacular tendencies<sup>201</sup>. This was not unlike Martienssen who, with all his Modernist fervour, had an intimate engagement with the vernacular, spurred on by his Baker-taught lecturer, Leith, and his visit to England in 1926 with McIntosh. As Herbert notes (1975:28), a vernacular tradition formed a paradoxical thread in Martienssen's influences. His early death perhaps masked the possibilities of a future, more regional, architectural direction.

But Le Corbusier recognised the exigencies of place and the formal possibilities inherent in Mediterranean architecture after his sojourn in the East. His later design of the petite Villa Au Bord Du Lac Léman of 1925 (see Fig. 7.24) clearly demonstrates the influences of his experiences and the requirements of building in less developed regions. The stoa plan and white-walled architecture

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– <sup>201</sup>An example would be Fagan's use of House Errazuris as precedent for his parents' house, as opposed to all the other more orthodox Modern precedents in Le Corbusier's publications.

bear a striking similarity of approach to Fagan's Die Es, demonstrating the power of Modern Movement canon synthesised with 'local tradition'. Other commonalities are the attenuated plan and the location of services as expressive elements placed externally rather than internally. The free plan has been tempered but the ribbon window is still evident. The splayed reveals to the small kitchen and entrance echo the windows of those found in Mediterranean and Cape houses. Structure and enclosure have been combined save for the light steel columns to the outside patio. Eileen Gray, too, adopted a similar architectural formal approach in her 1932-34 house Tempe à Pailla outside Castellar (see Fig. 7.24), near the Mediterranean port of Menton (Constant, 2007:145).



**Figure 7.24.** Top: Le Corbusier's Petite Villa Au Bord Du Lac Léman of 1925, plan and elevation (Corbusier & Jeanneret, 1943:74). Bottom left: Street view of Eileen Gray's Tempe à Pailla (1932-4) (Constant, 2007:147). Right: Plan of Tempe à Pailla (Constant, 2007:153).

Orthodoxy had been mediated by location and Fagan would effect a similar understanding and reinterpretation for the local Cape condition.

### 7.2.1.2. The third Modern Movement

Chapter 4 outlined the development of a third Modern Movement in Pretoria, South Africa, which at its heart aspired to be authentic, honest, local and practical. Authenticity was achieved through a return to the basics of architecture while honestly expressing the unfettered use of materials. It was practical as it had to work for the inhabitant through well-designed spaces, services and climatic controls, but it was also 'universal' as Fagan explains:

*Martienssen se proefskrif oor "The Idea of Space in Greek Architecture" is vandag selfs*

*meer tersaaklik as toe dit in 1941 voltooi is, aangesien dit gaan oor die struktuur/ruimte verhouding, en 'n algemene teorie oor verwante ruimtes daarstel. Of, soos Prof John Fassler in sy voorwoord tot die 1953 publikasie van die tesis geskryf het, "it deals with the essential stuff of which architecture is made" (Fagan, 1991b:8).*

[Martienssen's thesis on "The Idea of Space in Greek Architecture" is as relevant today as it was when it was completed in 1941, seeing as it deals with the structure/space relationship, and postulates a general theory on associated spaces. Or, as Prof John Fassler writes in his foreword to the 1953 publication of the thesis, "it deals with the essential stuff of which architecture is made."]

These influences were instrumental in forming Fagan's own response as he negotiated the requirements of modern living, local conditions, problems generated by initial orthodox Modern Movement examples in the Transvaal and his Pretoria School education to form a new take on modernity. At the same time he responded to the already established regional direction initiated by Baker and followed by Leith and Eaton<sup>202</sup>. All of these influences led to the development of a third modern movement. A local 'style' was sought, one that could provide a sense of Africanness that would dispense with foreign influences but still remain 'universal'.

On this score, well known composer Stefans Grové in explaining the increasingly African influences in his work, quotes Jean Cocteau that the more a poet sings from his roots, the clearer will be his song. And is the music of a Richard Strauss the less universal for being German, or that of Debussy for being French? (Fagan, 1996:7-8).

### **7.2.2. Fagan and the fourth Modern Movement – five points for a reflective modernism**

The word "Modern" when used with so-called Modern architecture refers not, as one would think, to contemporary or present-day building practice, but rather to a particular style of the early 20th century when free plans were introduced, forms followed function, ornamentation was largely dispensed with and the inherent qualities of materials were respected. None of this is incompatible with a Regional approach (Fagan, 2007:2).

Frampton (2007)<sup>203</sup> describes Fagan's architecture as a flexible 'other' modernity which recalls Colin St. John Wilson's definition of the architecture of Alvar Aalto, Hugo Haring<sup>204</sup> (1882-1958),

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– <sup>202</sup> This direction was later taken up by Karl Jooste (Fagan's university friend) who developed a regional-modern inflection in the same way that Fagan would.

– <sup>203</sup> Frampton was asked to write a citation for Fagan's nomination for honorary membership of the American Institute of Architects in 2007 – see Appendix E.

– <sup>204</sup> See Appendix J.

Hans Scharoun<sup>205</sup> (1893-1972) and others as "the other tradition of modern architecture". St. John Wilson (2007: 12) defined this as a counter to the rationalist tenets of the CIAM congress of 1928 that created a shift to the right (in a conservative sense). It formed an architecture that focused on tradition, nature and a response to local patterns of operation. Porphyrios, however, describes Aalto's architecture as heterotopic in its intention "to destroy the continuity of syntax and to shatter the predictable modes of the homogenous grid" (Porphyrios, 1982:2).

Although Fagan in his architecture attempts to diffuse orthodox modern Movement influences the result is certainly not completely heterotopic. He accepts the tenets of the Modern Movement architectural language but fuses it with

... a poetic reading of the site and a feeling for the vernacular which is abstracted in a sensitive modern manner without any hint of kitsch or pastiche in the white stuccoed walls and Cape Dutch chimney (Beck, 1985:48).

Fagan's architecture can be described as a 'reflective' modernism. It mirrors the true and original intentions of the Modern Movement through a search for form developed from a clear understanding of the building programme, mediated not only by climatic concerns but a broader concern for the *genius loci*<sup>206</sup>. It is also reflective through its expression of Modern Movement 'image'<sup>207</sup> which is returned, reused and reintroduced in undiluted visible form but in new and innovative transmutations. Fagan's architecture is reflective also because he pays conscious attention to and reconsiders the application of Modern Movement principles in a non-stylistic manner. He responds to tradition in a non-facile way. He manipulates new technologies and expresses new ways of making space, engaging with appropriate ways of living for current conditions. Fagan achieves what Martienssen failed to do by merging principles of Modern Movement architecture with those of the Cape Tradition to generate a new and innovative architectural language. Fagan's five points for a *reflective* modernism are unconsciously generated from his educational experiences, an appreciation of Le Corbusier's alternative design strategies, and the ability to synthesise these influences with the programmatic requirements of his clients and the exigencies of place.

[O]nly a deliberate and resourceful interpretation of regional conditions or personal expression of an architect of exceptional imagination and talent is likely to produce modern buildings of distinctive character (Greig, 1971:17).

#### 7.2.2.1. Orthodoxy and context (the universal and the local)

I believe that context is extremely important ... A new awareness of context has

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– <sup>205</sup> See Appendix J.

– <sup>206</sup> See Fagan's response to regionalism hereafter.

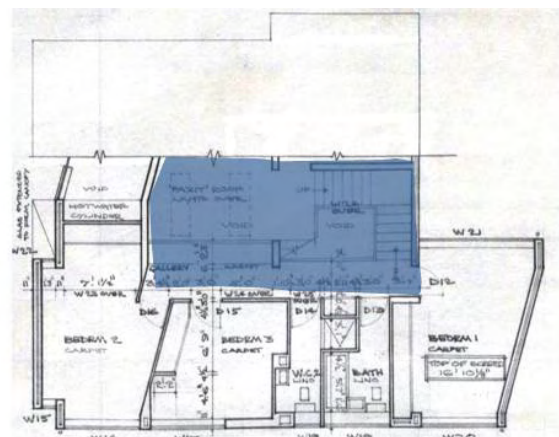
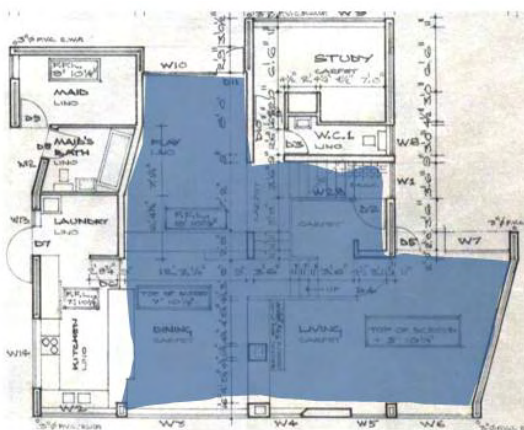
– <sup>207</sup> These can be described as Le Corbusier's canonic intentions that are broader than the mere formalism of his five point plan.

developed only over the past ten years or so. Before that architects were still heavily under the influence of the modern movement which, in understandable reaction against a tradition that stifled innovation, went to the opposite extreme and overstated their truths (Anon, 1991:15).

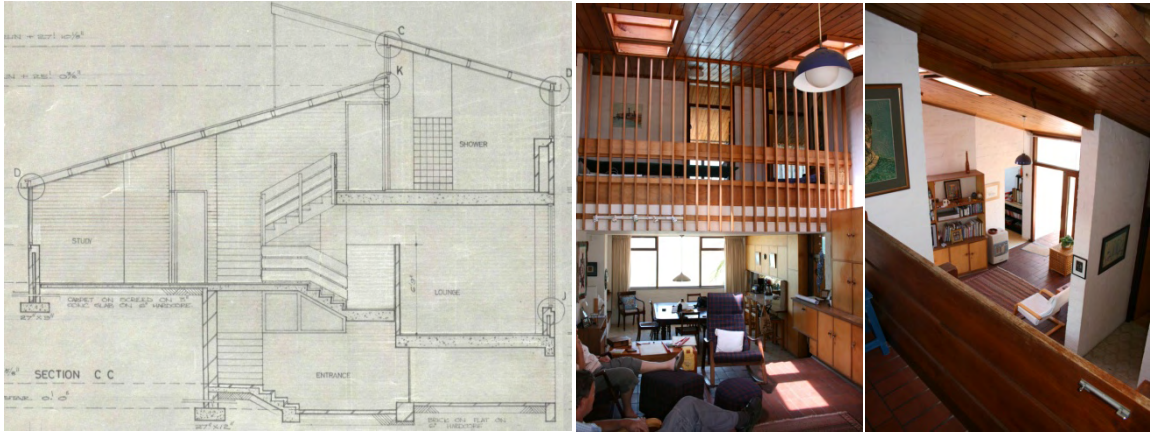
The Modern Movement's initial rational and empirical approach and the belief in technological progress fostered an architecture removed from context and the occupant's association with tradition. Fagan reconciles the advantages of both universalism and tradition through a reinterpretation of Modern Movement ideals, and the influences of place and vernacular architecture.

In this experience of the sympathetic handling of materials, rather than in the aping of designs in themselves inferior, lies also the greatest promise of our historical buildings in making a contribution to the quality of our contemporary architecture (Biermann, 1960:27).

Fagan reinterprets the technological, functional and spatial advantages of orthodox Modernism to suit current conditions and merges these with the necessity for human connection with place and the past. He connects with place through a response to climate, views, materiality and topography, all within a dominant form that is generated from both modernist and traditional typologies. Ordered planning configurations, that often rely on served and servant relationships, are tempered by formal manipulations that connect the buildings to their site through location (to orientate north or face views) such as at Die Es (1965) and House Swanepoel in Hermanus (1990), or with plans stepping down to create privacy as in Houses Raynham (1967) and Neethling (1983). The open plan is balanced with cellular spaces such as at Die Es and House Levin (1969) (see Fig. 7.25), while chimneys and walls act functionally, structurally and traditionally to imbue buildings with a dual historical and contemporary sensibility.







**Figure 7.25. Previous page:** First and second floor plans of House Levin (1969) with blue areas demarcating open plan space (Fagan archive - Job No.6910, 24/07/1969 and amended by Author). **Left:** Section through House Levin (1969) showing balance of open and closed spaces (Fagan archive - Job No. 6910). **Middle:** View from living room to bedrooms above (Author, 2009). **Right:** View to living area from bedroom access way (Author, 2009).

### 7.2.2.2. Economy (efficiency) and spirituality

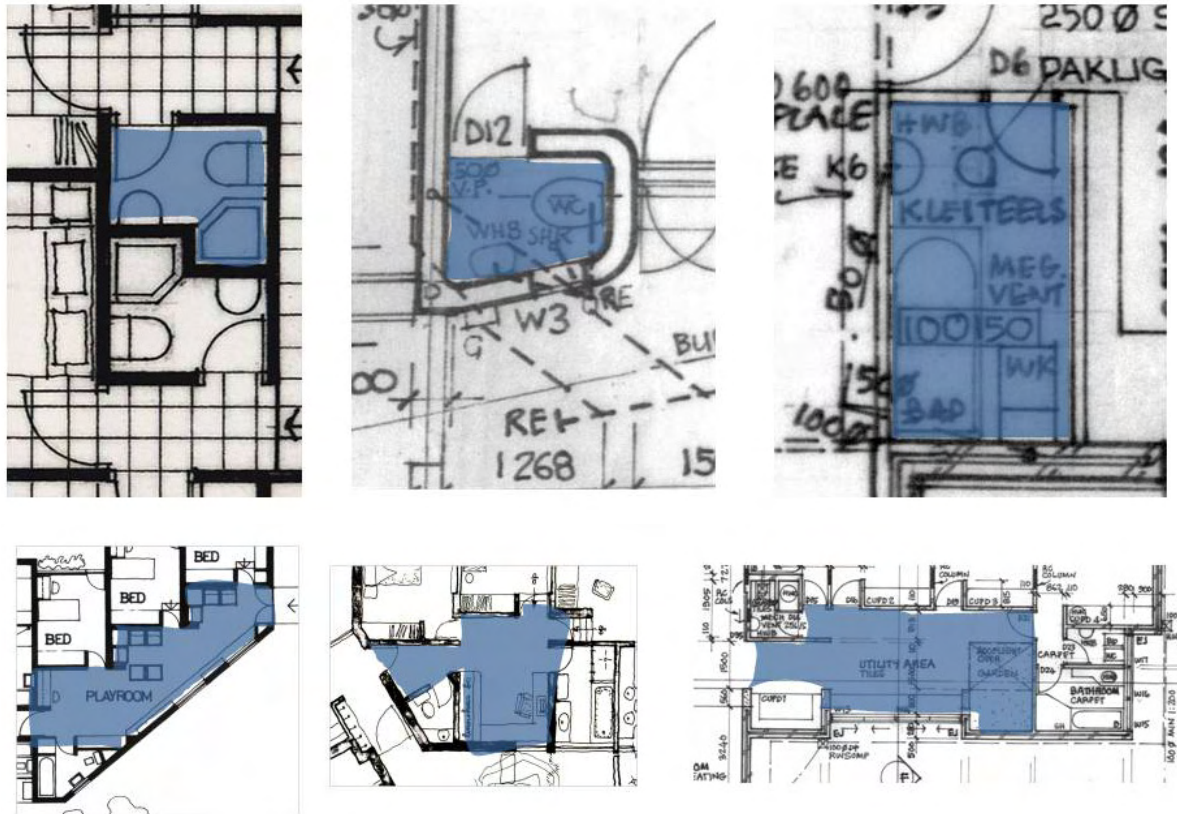
*Doeltreffende ontwerp het my nog altyd fassineer: om so min onnodige materiaal as moontlik te gebruik, om die natuur in te span eerder as om dit ten duurste meganies reg te stel (Fagan, c. 1975:17).*

[Effective design has always fascinated me: to use as little unnecessary material as possible, to employ nature rather than use mechanical means to correct its problems at great cost]

Fagan's fascination with effective design can be traced to his childhood tinkering, his motorcycle 'business', a UCT engineering training and the pragmatic education he received at the University of Pretoria fostered by staff members like Cole Bowen and Stauch. Three types of efficiency can be detected in Fagan's work: firstly the use of space, secondly the minimization of structure and material and thirdly the response to climate. But Fagan mediates these 'scientific' efficiencies with a 'spiritual' nuance that imbues his buildings with unique experiential qualities.

Spatial efficiencies are achieved through circulation routes, more often than not positioned centrally on entry (to create a bi-nuclear plan), and reduced in length as far as possible with the limitations imposed by attenuated plans. These echo the efficient layouts produced by Cole Bowen in his courtyard houses of the 1950s. Where extended routes are required, passages become useable spaces such as at Houses Bertie-Roberts (1966), Raynham (1967), Neethling (1983) and Auldearn (1992) (see Fig. 7.26). Service spaces are reduced to the minimum (see Fig. 7.26) – particularly bathrooms where Fagan's sailing influences are most marked. The bathrooms of Fagan's holiday

home Paradys (2003) are the most efficient, although possibly too cramped<sup>208</sup>. Fagan often internalises bathrooms to allow other spaces to gain views and light<sup>209</sup>, but this configuration and size reduction in Houses Swanepoel in Hermanus (1990) and Beyers in Betty's Bay (1998) lead to uncomfortable arrangements<sup>210</sup>. A Stauch influenced efficiency is the use of roof space. In both pitched and barrel-vaulted examples such as House Swanepoel in Cape St. Francis (1980) and Paradys, Fagan uses the room volume to create storage or sleeping spaces.



**Figure 7.26. Top:** Part plans of bathrooms (highlighted in blue) to House Swanepoel at Cape St. Francis(1980) (Fagan, 2005a:103), House Paradys (2003) (Fagan archive - Job No. 0204, 06/02/02) and House Beyers (1998) (Fagan archive - Job No. 9813, 03/11/1998). **Bottom:** Part plans of 'passage' spaces (highlighted in blue) to House Raynham (1967) (Fagan, 2005a:52), House Neethling (1983) (Fagan, 2005a:83) and House Auldearn (1992) (Fagan archive - Job No. 9302, 01/03/1993).

Structural and material efficiencies are achieved through a limited palette, minimal use of materials, materials left in their natural state with few finishes, and the collapsing of structure and enclosure

– <sup>208</sup> Fagan designed these spaces by standing on a large piece of paper and drawing an arc of 'reachability' (Fagan, 2009b).

– <sup>209</sup> Another possibility may be that Fagan does not want to compromise the coherency of the external wall surface with smaller punctures.

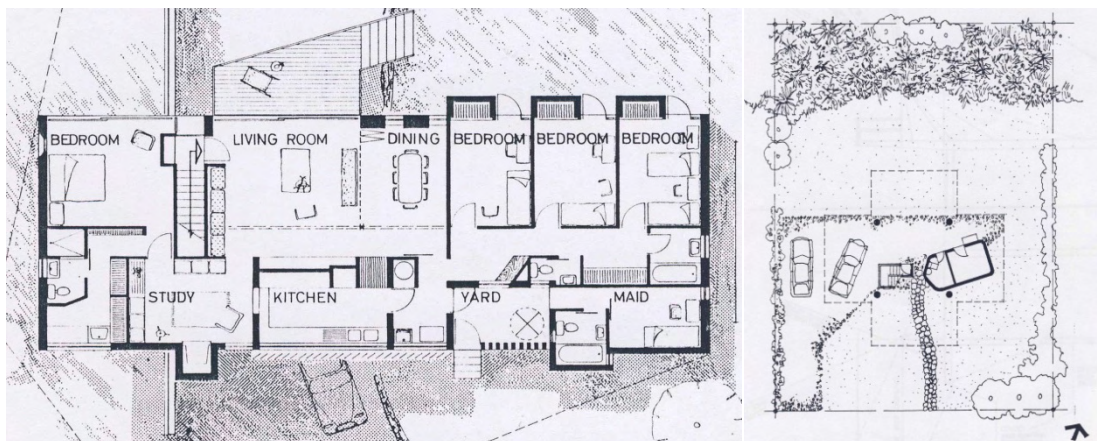
– <sup>210</sup> The internalised bathroom to the main bedroom was later swapped with the dressing room on the external garden wall to allow light and direct ventilation. This has disturbed the facade rhythm of solid and void so much that Fagan carefully photographed this elevation for his book "20 Cape Houses". House Beyers and Die Es have bathrooms on external walls with no windows, Fagan choosing to not disturb the solid/void elevational treatment. At Die Es this is alleviated by the rooflights and raised roof but in House Beyers the internalised condition provides rather uncomfortable spaces.

into one. Fagan defines these approaches as 'fitness for purpose' (1984a&b), and his engineering knowledge and the efficiencies of boat building have been instrumental in forming them.

This enabled designs like the undulating roof of Die Es which my structural engineer would not do, or the successful re-instatement of the Castle moat where my engineering consultant (Kaplan of Hill, Kaplan Scott) insisted on an elaborate filtration plant and concreting the whole moat out. He walked off the job in a huff when I insisted on no concreting, introducing the right fish, and planting reed beds, which was all completed at a fraction of the cost and is still effective to-day (Fagan, 2010b).

Structural efficiencies are best achieved in the barrel-vaulted examples where brick walls and roofs merge to form unified entities of structure and enclosure, such as at Paradys and Houses Lückhoff (1981) and Ida's Valley (1975). Structural and functional efficiency is best seen in House Bertie-Roberts (1966), where two in situ cast cantilevered concrete beams support the building while acting as service ducts (see Fig. 7.27). These beams provide economical support as they limit the necessity of direct support to the ground. In House Beyers (1998) a concrete column and cantilevered beam system raise the accommodation (see Fig. 7.27). But these efficiencies are manipulated by Fagan's innate design talent to aesthetic heights through considerations of junction, size and treatment.

Again it is only ignorance that can explain the belief, so useful to shield behind, that a structure will automatically be beautiful if it is fit for its purpose. Bridge design especially illustrates that fine aesthetic sensibility is essential for full success, as numerous detail design options that make equal structural and economic sense, will present themselves and a harmonious end result comes only through the developed aesthetic sensibility of the design engineer (Fagan, 1984b:31).





**Figure 7.27. Previous page left:** Plan of House Bertie Roberts (1965) (Anon, 1968:12). **Previous page right:** Ground plan of House Beyers (1998) (Fagan archive - Job No. 9813. **Left:** Concrete service beams at House Bertie-Roberts (1965) (Fagan archive - Job No. 644,undated). **Right:** Concrete columns and cantilevered beams and slab at House Beyers (1998) (Author, 2008).

Material palettes are limited to clay stock brick, concrete and timber with very little use of steel. Fagan does however resort to a combination of steel and timber in his flitch beams when timber depths become too uneconomical and possibly aesthetically less pleasing, such as at House Mitchell (2005). Materials are left in their natural state except for brickwork which is informed by the plastic nature of traditional Cape architecture. Even when unplastered it is painted white to heighten the play of light and shadow. Internally the only finish added is to the walls of bathrooms where tiling is used, most often with rectangular proportions.

Climatic efficiencies are achieved through north orientation and the use of thermal mass which, as Fagan (2008b) indicates, is suitable for the Mediterranean climate of the western Cape.

But architecture is more than building for practical needs and economy only: Good architecture is also concerned with meanings derived from natural, human and spiritual phenomena. It gives form to these meanings. Especially in the chaotic and fast changing world of today we have a strong desire to experience our existence as meaningful, and since time immemorial good architecture has helped man to fulfill (sic) this desire (Fagan, 1982:6).

Fagan mediates pragmatic and economic concerns – and the concern for the human condition – by spatial and material manipulation. Through this process he haptically connects the occupant to nature, the surrounding context and the material palette. He uses light and view to accentuate important features by employing rooflights and window orientations, such as the entrance rooflight at Die Es (1965) and bathroom rooflights in House Swanepoel in Cape St. Francis (1980) (see Fig. 7.28).



**Figure 7.28.** From the left: Entry foyer at Die Es (1965) (Author, 2008); Rooflight to bathroom of House Swanepoel in Hermanus (1990) (Author, 2009); Rooflight at House Beyers (1998) (Author, 2009) and glazed roof over entrance and dining area to House Keurbos (1951) (Author, 2009).

Material differences heighten transitions between spaces, such as the suspended timber platforms at Die Es, Keurbos (1951) and House Raynham (1967) that mediate between hard and soft floor surfaces. In contrast with Le Corbusier's platonic volumes, Fagan exploits the vertical dimension to increase and decrease height to accentuate movement and entry. Die Es and Houses Raynham and Auldearn (1992) are effective in their spatial constriction and release. These devices form a synergy between Corbusian and Cape architectural promenades. The visitor is taken on a journey that exploits the advantages of context through view, light and solar contact. Views are exploited through focussing on the mountain at House Raynham and the sea at House Patterson (1966) (see Fig. 7.29) and sea and mountain at Die Es (see Fig. 7.29). Light is used to effect in Houses Beyers (1998) and Swanepoel in Cape St. Francis (1980) where rooflights give focus to internal spaces around the chimney. Solar contact is achieved at Keurbos (see Fig. 7.28) and Houses Auldearn (1992) and Swanepoel in Hermanus (1990) through large rooflights that focus on internal 'gardens' in the first two examples. Human touch is accentuated through anthropometric and proportional systems. This is more evident in Fagan's early work where time could be spent putting into effect Hambidge's philosophies. Die Es displays these approaches best where the entire form of the building is organized according to a proportional system, including door handles which respond directly to the movement of the hand.



**Figure 7.29.** From the left: Window to the sea from the study area on the mezzanine at House Patterson (1966) (Author, 2008); Window to main bedroom at Die Es (1965) facing Lion's Head<sup>211</sup> (Author, 2008); View to back of Table Mountain from main bedroom at Die Es (1965) (Author, 2008).

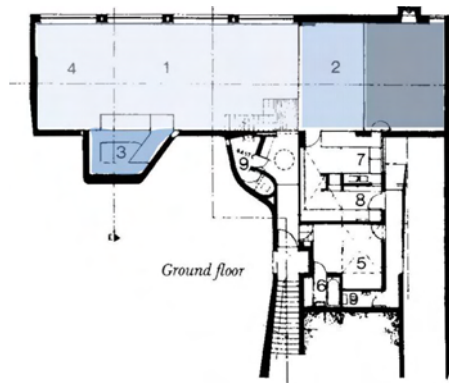
### 7.2.2.3. Modern and traditional spatial typologies: the traditionalised free plan

The architect is among those attempting to create South African architecture which understands historical vernacular without duplicating it, responds to the site and the particular environment generated by the climate, light, etc., and develops the free plan – an appropriate form to the casual way of life (Beck, 1985:48).

The Modern Movement call for a free plan was a reaction against the spatial and formal containedness of tradition. The intention was to provide flexibility of use and a 'healthy' internal condition. The consequence was an abstracted spatial configuration that in its universalist heyday was devoid of cultural significance. The modernist typology had become self-reflective and removed from its direct context. Fagan recognises that the original tenets of 'healthy space' are still relevant but that mediation is required between this condition and that of 'recognisable' domestic space.

Fagan mediates the requirement for open and flexible space with the cellular nature of quieter and more private spaces, all within a controlled container. Here Fagan (2008c) cites the influence of dialectical cellular and open-plan space in Le Corbusier's La Tourette. House Levin's (1969) central volume extends the Modern Movement typology of the free plan upward while cellular spaces define its boundary. In House Raynham (1967) the circulation route expands and contracts to form living, dining and playroom spaces, while at Die Es (1965) (see Fig. 7.30) the living room and raised dining room provide many spatial possibilities. As Fagan (1983:9) has remarked, "I feel that today's house at least, calls for a certain inner complexity to provide for various moods".

– <sup>211</sup> In the last two years Fagan's northern neighbours have increased their existing house to a triple storey destroying the originally designed view (much to Fagan's disgust!).



**Figure 7.30.** Ground floor plan of House Die Es (1965). Shades of blue indicating the various spaces within one volume which can be used independently or at once - the living area is to the left, followed by the raised dining area platform and finally the outside court (Fagan, 2005a:27 and amended by author).

#### 7.2.2.4. Technology and craft (machine and hand)

The truth of the matter is that he is more knowledgeable about technology and skilled in its use than Renzo Piano, Norman Foster or Richard Rogers. It is intriguing to ponder what he might have done if he'd had access to the engineering, manufacturing and craft skills, the budgets and materials, these architects have been able to draw on (Buchanan, 2006:3).

Fagan (1972:2) has called for the development of a contemporary vernacular using today's technologies. His lifelong hands-on approach (see Fig. 7.31) to making has sensitised him to the opportunities of new technologies and techniques. Materials are used directly according to their inherent properties and expressed honestly, echoing Cole Bowen's strategy of "no second or third processes are required" (Fassler, 1956:178). Fagan's choice of appropriate materials mediates practical and aesthetic requirements and echoes the 19th century theorist Gottfried Semper (Semper, 1989:102) who argued that

... if the most suitable material is selected for their embodiment, the ideal expression of a building will of course gain in beauty and meaning by the material's appearance as a natural symbol.

Much of the detailing in Fagan's buildings mirrors that of yacht design and construction, where a minimal amount of material is required to perform as many functions as possible and under the most extreme conditions. Fagan's plea is for the use of contemporary technologies and their associated processes:

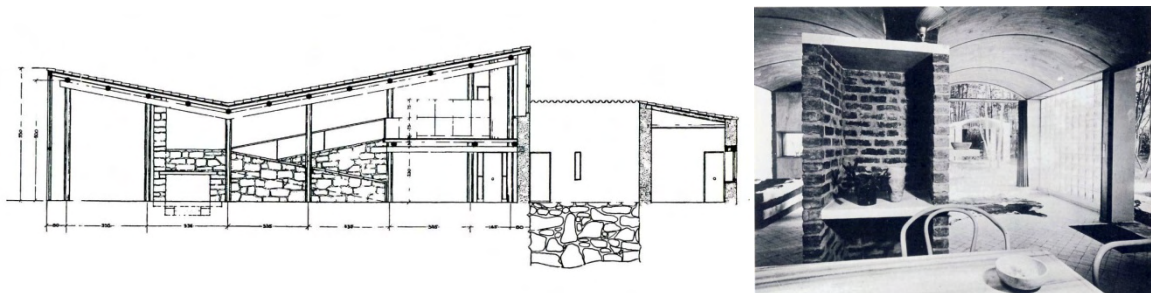
By this I in no way imply an arts and crafts approach, for machine objects can evoke poetic response. Nor a detailed technical knowledge of what goes into a modern building, which is the province of your specialist consultants. But I do mean sufficient experience (and there is nothing like learning through your own pair of hands!) to truly understand the character of your basic materials, timber, metals, concrete or plastics.

And to understand the wonderful possibilities of the basic welding, machining or manufacturing processes by which these are transformed. Corbusier justly wrote that the business of architecture is to establish relationships by means of raw materials (Fagan, 1991b:9).



**Figure 7.31.** Left: Fagan in his workshop at Die Es c.1965 (Fagan archive, undated). Right: Fagan's family all busy with the construction of Die Es (Fagan, 2012b).

Le Corbusier's cubist work was, however, less honest in its formal expression of materials through his use of plastered and white-painted concrete frames and block infill. Here, structural and spatial expression was more important. Later work and regional designs such as Errazuris in Chile (1930) and *Petite Maison de Weekend* (1935) achieve more honest material expression (see Fig. 7.30).



**Figure 7.32.** Left: Section through Le Corbusier and Jeanneret's House Errazuris in Chile (1930) (Frampton, 2001:132). Right: Interior view of Le Corbusier and Jeanneret's *Petite Maison de Weekend* (1935) (Frampton, 2001:136).

Fagan mediates these two contrasting positions in his work through the use of modern technologies and manipulations of tried and tested vernacular technologies. He relies on the tradition of the Cape wall as both structure and support, collapsing Le Corbusier's canon into one. Most structural materials save for plastered and painted brick walls are expressed in their 'original' state. Reinforced concrete is left in situ, sometimes even compromising the possible totality of the white wall surface as at Die Es (1965)<sup>212</sup>. The concrete work in House Beyers (1998) (see Fig. 7.27) is pure in its expression of the supporting structure. Brickwork is often bagged and painted as in

– <sup>212</sup> A careful investigation of the drawings shows that there are in fact concrete column stiffeners in the walls but they are either hidden within brick skins or are plastered over. The same situation occurs at Paradys, even though the architect professes that no concrete was used in the building – he was perhaps referring to the brick barrel vaults only.



houses Raynham (1967) and Swanepoel in Cape St. Francis (1980), which creates a plastic mediation between traditional plastered forms and raw brick. Brick floors are however left with their original colour and texture save for an applied linseed and turpentine mixture, the colour providing a connection with the earth like the floors of old (see Fig. 7.33). Timber structure is hardly ever painted but timber screens, doors and windows that form part of the wall often receive decorative colours to tie them mythically to their surroundings (see Fig. 7.33). Very few "manufactured" materials are used and components such as aluminium windows and doors are often placed within timber subframes. These elements are also never off the shelf but are made to suit functional and aesthetic requirements.

Gabriël Fagan is the polymath architects aspire to be. After studying civil engineering prior to taking up architecture, he has an instinctual feeling for and knowledge of all things technical. Added to his skills as a designer are those of a craftsman who builds his own boats, plane and house. A legend as a sailor (in the oldest craft he won the Cape to Uruguay race outright) and pilot, he is a remarkable photographer, and a musician too (Buchanan, 1995:79).



**Figure 7.33.** From the left: Stone pebbles as floor at Die Es (1965); brick floors at House Raynham (1967) and timber windows, door and eaves at House Raynham (All Author, 2008).

In Fagan's hands, technology becomes craft through a thorough process of engagement with the qualities and possibilities of materials and how they can be shaped to suit both functional and aesthetic requirements. Fagan comments:

Architects need to see themselves as craftsman, as tradesman ... as a profession we need to move away to some extent from this idea that we have of ourselves as artistic Designers with a capital D. buildings should be visually attractive if effective design allows for this. But not at the expenses of effective design (Anon, 1991:14).

Another of Fagan's heroes is Leonardo da Vinci. Fagan has taught himself to be similarly

ambidextrous and, in a way, reflects many of the Italian Renaissance polymath's skills. Fagan's innate design sensibilities, together with a lifelong hands-on approach, foster innovative technological solutions. He (1991b:2) remarks that he still subscribes to the Vitruvian description of an ideal architect:

The science of the architect depends upon many disciplines and various apprenticeships which are carried out in other arts. His personal service consists in craftsmanship and technology – craftsmanship is continued and familiar practice, which is carried out by the hands in such material as is necessary for the purpose of a design. Technology sets forth and explains things wrought in accordance with technical skill and method.

His own house is a tour de force of examples much more so than any other of his houses, due to his and his family's direct involvement with the construction process. Four simple examples will illustrate the point. It has been rather naively suggested (Fagan, G.T., c.1975:13) that the syncopated roof was formed to echo the sea beyond. But the possibilities of views to the mountain behind and reflected light from the sea to the west, together with a search for plastic expression, were more pressing concerns. The question was how to form such a roof in the strongest but lightest way possible, and as Fagan (1985:13) has noted, so that it would not fall on their heads. Frampton (2007)<sup>213</sup> incorrectly describes the roof as a "sinusoidal concrete shell" which belies the strength and thinness of the timber that Fagan was able to build with. The roof is, in fact, constructed of six layers of pre-planed pine strips laminated on site and balanced over a central wooden beam. The entire construction is reminiscent of an upturned hull<sup>214</sup>, perhaps influenced by Fagan's boat building exploits (see Fig. 7.34).



**Figure 7.34.** Left: The roof of Die Es under construction c.1965 (Fagan, 2012b). Right: Layered construction of Die Es roof (Fagan, 2012b).

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– <sup>213</sup> See Appendix E.

– <sup>214</sup> The most direct example is the roof Fagan designed for the Dias Museum in Mossel Bay, where an existing structure was adapted to house a Portuguese caravel. The roof form rises and falls in a functional manner to accept the ship's mast, but the resultant form expresses its internal programme possibly accidentally.

Fagan also employs a reinforcing rod as a simple and continuous handrail leading (see Fig. 7.35) the visitor from the carport to the front door, while internally Japanese fishing floats (see Fig. 7.35) are used as light fittings. Door handles have been anthropometrically fashioned, achieving a perfect synergy between man and machine, while the front door is fashioned from old copper boilers (see Fig. 7.35).



**Figure 7.35.** **Left:** Continuous steel rod handrail at Die E (Fagan, 2012b). **Middle:** Glass Japanese fishing float reused as light fitting at Die Es (Fagan slide archive, undated). **Right:** Front door at Die Es made from old copper boilers (Fagan, 2012b).

#### 7.2.2.5. Background and foreground

Building in context is never easy, and the most common obstacle is the ego of client and architect, who create a building that will clearly stand out. As expressed in Brent Broolin's book on the subject: "Few stars of the profession are in the habit of designing background buildings ... and they feel that they will somehow prostitute themselves if they build anything less than unique in form or concept." There are instances, but they are by very definition few, where a building can be in strong, yet sympathetic, contrast to its context (Fagan, 1983a:5).

Orthodox Modern Movement buildings were more often than not iconic in form. They dominated their landscapes, announcing their object presence. But it was perhaps the hovering nature of these buildings that divorced them from their contexts, creating alien environments. The starkness of initial cubist forms later gave way to buildings that still announced their presence but which attempted to connect with their surroundings through careful siting and material use. Locally, the shift in Pretoria from the white cubism of the Transvaal Group to an architecture more sympathetic to landscape paved the way for future mediations. Fagan first synthesised the dialectics of background and foreground through his reinterpretation of Modern Movement planning and context in the banks he designed for Volkskas (see Fig. 7.36). The buildings comment "Ekskuus my dat ek hier sit!" [excuse me for sitting here] almost apologising for their existence (Fagan, 2008e). Later

Fagan would synergize the modernist box and traditional Cape form with a deeper understanding of site and its relationship to spaces around and beyond. House Auldearn (1992) maintains a strong singular form but digs into and straddles a hill, echoing a Frank Lloyd Wright Prairie approach, while Paradys (2003) (see Fig. 7.36) is iconic in its form making but through its siting hides below the road. It announces its presence only on the western ocean edge and through an exaggerated chimney.



**Figure 7.36.** **Left:** Existing sandstone buildings in the Main Street of Ladybrand in Free state (Author, 2008). **Middle:** Sandstone columns to Fagan's Volkskas Bank (1958) in the same town (Author, 2008). **Right:** House Paradys (2003) 'hiding' in the dunes in Langebaan (Photo courtesy of Du Plessis, 2004).

### 7.2.3. Summary

Fagan's reflective Modernism had its origins in the regional-modern expression of the Pretoria School, which he mediates with the orthodoxy of pastoral modernity and the initial forays of the Transvaal Group. It has been influenced by the Mediterraneanism of Le Corbusier's architecture and the effects of the third Modern Movement in Pretoria in the 1940s, which resulted in architecture that was authentic, honest, local and practical. Fagan's reflective modernism mediates the polarities of universalism and place, efficiency and spirituality, modern and traditional spatial typologies, technology and craft, and buildings as background and foreground. But it is the mediation between tradition and the Modern Movement that has fuelled Fagan's relative regionalism.

### 7.3. FAGAN AND REGIONALISM

#### 7.3.1. Fagan's regionalist context

Equally our building should respond to land, place, climate, tradition, race and economy (Fagan, 1972:1).

Fagan's regionalist approach to architecture has its origins in an intimate childhood understanding of place and a less theoretical architectural education (Fisher *et al*, 1998:128) that fostered pragmatic yet independent thought, while accentuating the necessities of modern day life. It also originated in a world removed from mainstream Modern Movement architecture and a waning Witwatersrand Department of Architecture influence. The work of Fagan is certainly informed<sup>215</sup> by the regional shifts that were taking place in the Transvaal at the time of his education, but his buildings developed a character and local influence of their own. They are therefore reactions from a peripheral contextual position. Fagan's architecture aligns itself with Pallasmaa's view – that regional character is formed from contradictory ingredients (1988; 2007:135) – as well as Mumford's view that

... it will be useful if we formed the habit of never using the word regional without mentally adding to it the idea of the universal – remembering the constant contact and interchange between the local scene and the wide world that lies beyond it (Mumford, 1941; 2007:101).

Fagan's architecture does not reject universal modernism that bears similarities to regionalism in its respect for the qualities of materials and structure (Ozkan, 1985; 2007:107). The resultant architecture is less about resistance and more about engagement and in the process creates a *relative* regionalism by mediating between these opposing approaches.

Unlike Post-Modernism, Regionalism can be no mere syncretism or slick collage of elements from Modernism, history and region. Instead it must be a genuine hybrid, a totally new configuration which may include a remembrance of the past, but transformed or framed in terms of its significance for today (Buchanan, 1983:16).

Fagan's architecture can also be located at a junction between the nostalgic regional approach of Martin Heidegger<sup>216</sup> (1889-1976) (and later Norberg Schulz<sup>217</sup> (1926-2000)), and the radicalism of Paul Ricouer<sup>218</sup> (1913-2005). It does not attempt to counter the Ricouerian crisis of civilization by negating modernity and relying only on tradition or regionalism (in the strictest sense of the word),

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– <sup>215</sup> Fagan's student work certainly bears formal similarities to that of Hellmut Stauch and other influential Pretoria University lecturers of the time.

– <sup>216</sup> See Appendix J.

– <sup>217</sup> See Appendix J.

– <sup>218</sup> See Appendix J.

but accepts the functionalist and technological principles of the modernist project.

It differs from a Critical Regionalist standpoint as it does not react *against* universalisation and its formalist tendencies, nor is it an architecture of resistance. It was formed outside mainstream modernist influences in a time and place where issues of global consumption had not yet taken hold. Also, Critical Regionalism reacted (in the main) against the work of the clichéd Post-Modern Historicists, the effects of which only reached South Africa in the late 1970s. As Tzonis (2003:10) points out:

The notion of critical regionalism was first introduced almost twenty-five years ago. The aim was to draw attention to the approach taken by a number of architects in Europe at the time, who were working towards an alternative to postmodernism, the dominant tendency of that period. Postmodernism, as its name suggests, aspired to succeed modernism whose ideals and norms were seen as responsible for the numerous failures that characterized most reconstruction and urban renewal projects realized since World War II ... Like its modernist forerunners, most postmodernist buildings continued to impose top-down, reductive and universal formulas on those who utilize them.

Ingersoll (1990:124), however, notes that "...architects may indeed be producing an architecture of Critical Regionalism, but few would be aware of doing so". This was probably the situation with many post Second World War architects in South Africa, as they were grappling with the conflicts of a Modern Movement education and the requirements of local conditions.

Contemporary Latin American architecture of a regionalist character is not primarily a reaction to the West, or to 'world culture', as the word resistance would imply, but a response to local circumstances. It should not be seen as a marginal practice, but as a development parallel to contemporary architecture in the industrialised West (Eggener, 2002; 2007:404).

Tzonis (2006:216) refers to the architecture of the 1930s, 1940s and early 1950s in South Africa as "modern-regionalism".

### **7.3.2. Influences on Fagan's regionalist approach**

#### **7.3.2.1. The physical: a contextual upbringing**

(Environment and inhabitant; thinking and making)

Fagan's consciousness of and engagement with nature can be traced back to his childhood love of all natural elements. Earth, wind, water were all explored, understood and manipulated. The mountain behind the childhood home, the tunnels in the ground and the mud making exploits form the most basic responses to building (in a primitive sense) and imbued Fagan with a connection to

nature, and a love for and deep understanding of place. He furthered these investigations with water and its relationship with wind by building and sailing a range of canoes and boats. Fagan finally explored the heavens above when he first started flying at the UCT flying club during his engineering studies.

Partly because of his love of sailing and flying, Gawie was already very knowledgeable about what we would now call 'passive environmental controls', ways of modifying microclimates and internal conditions using such things as high thermal inertia, differential wind pressures and entrainment of air flows to achieve gust-free stable conditions etc. – all skills now considered crucial to pursuing the 'green' design agenda. He not only knows about these things, he has a great 'feel' for them, and inevitably some of it rubs off if you spend time with him (Buchanan, 2006:2).

The tangible engagement with climate through sailing and flying has allowed Fagan to understand the effects of wind and rain and the necessity for bodily protection. This mediation between environment and inhabitant initiated Fagan's later architectural responses. But it was not just the experience of these influences that engendered a contextual approach. The act of doing (see Fig. 7.37) through making is what sets Fagan apart from other architects who also developed similar contextual approaches. House, boat and plane building have allowed Fagan to develop an intimate understanding of materials and technologies and their relationship with nature.



**Figure 7.37.** Fagan and family at work on Die Es (1965). On the left Fagan can be seen with Gwen hauling concrete with their wheel barrows while his son Hennie fixes steel for the first floor in the centre picture. On the right Fagan pours concrete into the formwork of one of the columns, a job he notes (2012b) that no one else was prepared to do from the rickety scaffolding!

### 7.3.2.2. Educational

(Choice and necessity)

The establishment of an independent Department of Architecture at the University of Pretoria in 1942 and the untimely death of Dr Rex Martienssen mark the beginning of a shift of the architectural cutting edge from Johannesburg to Pretoria. Unlike Johannesburg, which made an elegant translation of Purism in the early 1930s, Pretoria architecture is marked by the promotion of a regional ethos, a synthesisation (sic) of international concepts with locale: climate, terrain, building traditions, culture and economy (Peters, 1998:175).

Fagan started his education at the University of Pretoria in 1947. The department was relatively new and was headed by prof. A.L. Meiring<sup>219</sup>. He hired staff members sympathetic to an architecture influenced by place, such as Hellmut Stauch who joined the department in 1943. Fagan remembers (2008e) that the course was contextually biased and that "the term regionalism was not yet current but we were taught to respond to the site rather than resorting to preconceived styles". Fagan also (1996:8) clearly describes the influence of the lecturers at the Pretoria School :

*Indien streekskultuur nou doelbewus nagestreef moet word, moet ons dit seker maar vir lief neem, maar in my studentejare was ons gelukkig nie so deur twyfel oorval nie. Helmut (sic) Stauch, my derdejaar ateljeemeester (en vir wie ek terloops bowendien bewonder het oor sy seilvernuf), het sekerlik vir ons deur sy voorbeeld eerder as deur self-waarneming probeer leer: Ek voel steeds dat sy klein dubbel-afdak huisies, altyd op die 3' 4½" standaard staalvenster-module, klassieke voorbeelde van 'n vindingryke streeksboukuns was. Ook woonstelgeboue soos Marchie Mansions of stadsgeboue soos Hochstetter House (albei saam met Aubrey Nunn) kan nouliks op verbeter word as doeltreffende oplossings vir hul programme en die Pretoria klimaat (Fagan, 1996:8).*

[If a regional culture is to be purposefully pursued, then we will have to accept it, but in my student days we were luckily not overcome by doubt. Helmut (sic) Stauch, my third year studio master (and whom I admired for his sailing skills), taught us through example rather than self-observation. I still feel that his small, butterfly roofed houses, always on the 3' 4½" standard steel window module, are classic examples of an inventive regional architecture. Also apartment buildings like Marchie Mansions or city buildings like Hochstetter House (both with Aubrey Nunn) can hardly be improved upon as effective solutions for their programmes and the Pretoria climate.]

Robert Cole Bowen joined in 1946 after leaving the Public Works Department to work for Norman Eaton, and remained in the department till 1953 (Steenkamp, 2003:4-5). Three of his 1950 to 1951 houses were published in the Architect and Builder of April 1953 and display a clear interpretation and influence of Stauch (see Fig. 7.38). They display a sensitivity to climate through the orientation of all bedroom and living spaces due north. Carefully calculated eaves overhangs shield the spaces from the summer heat while allowing winter solar gain. Inside and outside spaces are merged through sliding floor-to-ceiling glass panes, while randomly laid slate paving is used in all spaces save for the kitchen and bathrooms (see Fig. 7.38). Built form is economically organized to define external spaces. Cole Bowen was an ardent exponent of the courtyard (see Fig. 4.15) which he notes had in history been defined through climate and had been used in Cape Dutch and Ndebele architecture (Cole Bowen, 1957a:48). An economy of means is achieved through clever planning that minimises circulation space and the use of simple and cheap materials such as painted brickwork. Although Fagan was influenced by the regional trends of Baker, Leith and Eaton through his experiences with Eaton as teacher and examiner, he did not identify with Eaton's Zimbabwe-like vision of an organic architecture, remarking that (1983a:3) "I sensed my home to be

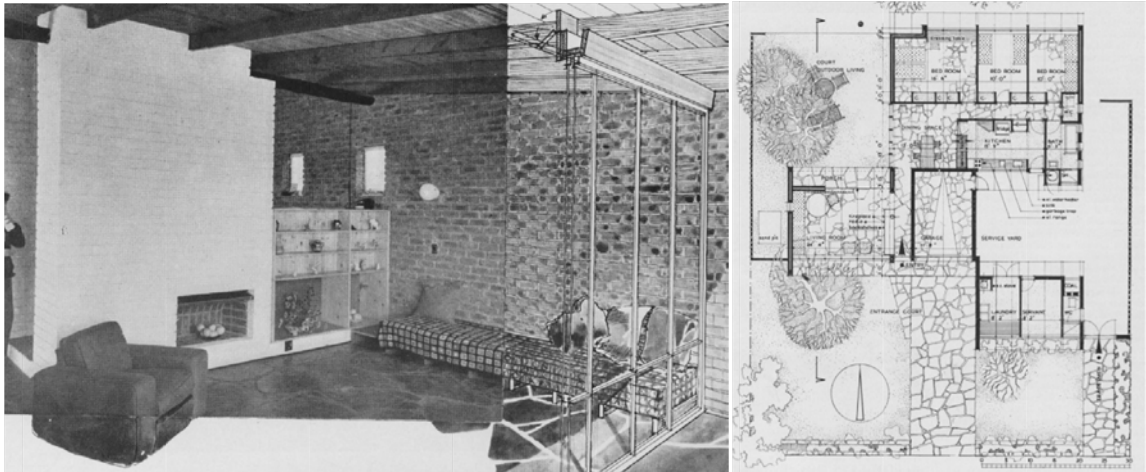
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– <sup>219</sup> For a more detailed explanation of the school see Chapter 6.2.4.3).



rather in the Cape, mellowed by centuries of European culture". Fagan thus responds to Pierneef's call for an Afrikaans architecture devoid of Dutch influences.

Coming from a home where my father had, even as a student in London together with C. Louis Leipoldt written contributions to promote Afrikaans in lieu of Dutch, and where Langenhoven was a family friend, I can understand Pierneef's yearnings (Fagan, 1996:7).



**Figure 7.38.** Left: Living space of Cole Bowen's Vincent House in Pretoria (1951) showing bagged and painted brickwork walls (Anon, 1953:44) and plan of House Hester in Pretoria (1950) on the right showing slate paving to living and bedroom areas (Anon, 1953:38).

### 7.3.2.3. Professional: a regional initiation – the Volkskas years (Corporate expression and regional identity)

Twelve years followed as resident architect for a commercial bank based in Pretoria. Flying myself around the country taught something of the climatic and contextual differences, and rather than follow the course subsequently taken by the Trust Bank, of an impersonal architecture that could debateably (sic) further the corporate image but is more often than not disastrous for the village-scape, I was allowed to adapt our buildings to local conditions as best I could.<sup>220</sup> (Fagan, 1983a:50).

Fagan's work for Volkskas Bank can be described as reactive regionalism as it sought to reconcile politically nuanced planning requirements with a respect for the architecture and *genius loci* of small country towns. Regional influences have ranged from the use of historically correct materials to urban responses. In Ladybrand Fagan (see Fig. 7.39) adopted the sandstone aesthetic of the old colonial town, enriching the bank façade with strong portico like columns that announced the bank's presence, while the floating roof and glazed edges express a universal architectural

– <sup>220</sup> This is the original quote from Fagan's archive which was tempered when published in *Architecture South Africa* of May/June 1983.

approach. The design of the 'hi-tech' steel and glass bank in Roodepoort (see Fig. 7.39) reinforces its triangular site while expressing a more austere urban form.



**Figure 7.39.** Left: Fagan's Ladybrand Volkskas Bank (Fagan archive, undated). Right: Fagan's Volkskas Bank in Roodepoort (Author, 2008).

#### 7.3.2.4. Professional: conservation work (Tradition and progress)

Since 1969, Fagan has worked in earnest on the conservation of many South African heritage buildings, such as those in the main street of Tulbagh, Government House and The Castle in Cape Town (see Fig. 7.40). Fagan has learnt many lessons from the detailed investigations that had to be undertaken, such as materials and their responses to climate and the creation of indoor comfort. Buildings and their relationship to the landscape through siting, view and aspect have all been valuable regional inputs for Fagan's domestic architecture. He has also had firsthand experience of the craftsmanship of old and the sailor in Fagan must have been attuned to the skill of the colonialist. Pearse (1968:29) remarks that

... in the seventeenth and eighteenth centuries, when shipbuilding had reached its greatest development in Holland, there is no doubt that the craftsman was very highly skilled.



**Figure 7.40.** Left: Main Street of Tulbagh restored by Fagan after the earthquakes of 1969 (Fagan, 1975:cover). Right: Aerial view of the Castle restored by Fagan from 1969 to 2002 (Anon, 2002:43).

### 7.3.3. Fagan's Regionalism

This seminar is about Regionalism, but I must confess that being a practicing rather than an academic architect, I am not quite sure what it means – or precisely where it overlaps with say Contextualism (the subject of another seminar this afternoon) at the one end of the scale, and Nationalism or even Internationalism at the other (Fagan, 1985:1).

The above introduction to Fagan's 1985 lecture at the University of Cape Town Architecture Students' Conference is his most lucid articulation of regionalism, pointing to a mediation between theoretical and pragmatic concerns. At a theoretical level he notes that regionalism is reactive to both the anti-contextual approach of Internationalism as well as reductive interpretations of traditional architecture. Fagan sees tradition as catalytic, quoting Tange and Eaton in their arguments for principled rather than aesthetic understandings of vernacular architectures. Pragmatic concerns are also clearly highlighted by Fagan (1985:1) as he notes the important constituents of a regionalist approach:

But climate, available materials or technology, are far from being the only or even the prime determinants of built forms. Rather, form is the result of a whole range of socio-cultural factors, with climate, materials and technology seen as modifying only. The importance of a cultural factor such as tradition in the choice of form is well illustrated in our local use of North European pitched roofs and Mediterranean style flat roofs, standing cheek by jowl, both using the identical corrugated iron as a roofing material.

He also states (Fagan, 1996:6) that "by extension, neither planning nor architecture can be conducted in a vacuum divorced from its region". At a theoretical level, Fagan's architecture can be described as a *relative* regionalism. Its nature is dependent on the external influences of the third Modern Movement and internal influences of the inherited Cape vernaculars, aligning itself with Pallasmaa's view (2007:135) that regional character is formed from contradictory ingredients. The result is a heterotrophic response that is less about resistance or acceptance and more reactive in nature. The architecture, being firmly rooted in time and place, deals with the conflicts of a regional and reflective Modern Movement education and the requirements of local conditions, but it is in opposition to a regionalism that negates the universal. It engages rather than resists and through this process becomes a tool of negotiation mediating between the lessons of tradition and the necessities of modernization. It is a highly personal approach that unconsciously mediates the above-mentioned dialectics.

Regionalism ... is often not so much a collective effort as it is the output of a talented individual working with commitment towards some sort of rooted expression (Frampton, 1983a:156).

Fagan's architecture does not attempt to self-consciously create a regional South African architecture, but presents a new understanding and reinterpretation of Cape vernacular traditions

together with modernist attitudes to function and space making.

The work of Biermann, Fagan and architects like them have many of the formal components of an appropriate regional architecture that could embrace the adaptations of a future mixed society. (Disappointingly, younger architects in South Africa have not developed these leads, falling back instead on the easier enterprise of formalism copied from current historicism) (Beck, 1985:48).

Pragmatically, Fagan's relative regionalism reflects an appreciation of the qualities of place through use of materials, and response to climate and ways of living. Fagan sees a local architecture as “a return to basic values, and an enabling architecture adapted to our climes and cultures [which] above all, [can] restore the self-esteem of our nation” (Fagan, 1996:10). Even more pragmatically, Fagan (1979:7) states:

But even with the site determined, the building must relate to its environment, and a good aid is to determine all angles, horizontal and vertical, of prominent features as seen from the site, or conversely, as the finished building will one day be seen from these same places (Fagan, 1979:7).

As discussed in Chapter 2, a regionalist approach is, for Fagan, common sense architecture that does not require any theoretical justification.

### 7.3.3.1. The constituents of Fagan's regionalist approach

I would like to recall the words of Lewis Mumford<sup>221</sup>: ‘The time has come for architecture to come back to earth and make a new home for man’ (Fagan, 1996:10).

Fagan's regionalist responses alternate between the extremes of response and resistance. It is a regionalism of engagement as it mediates the polarities of cultural continuity (through tradition) and the need for progress in terms of technology and ways of living. At a theoretical level, Fagan's regionalist responses most closely align with those of Lewis Mumford as both their philosophies were formed as reactions to an already mediated and dislocated Modern Movement, were developed at similar times, and occurred in regions where industrialization had had less of a dramatic impact (Curtis, 1996:454). Their attitudes are also similar in their dual criticisms of modernity and tradition. Fagan has read Mumford's books extensively<sup>222</sup>, and often refers to his writings in his lectures. At a practical level, Fagan's regionalist responses are formed through his appreciation of the Cape tradition and his translation of vernacular principles highlighted earlier in this chapter, as well as a respect for place, materials and climate.

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– <sup>221</sup> In a lecture series “Glimpses of the Cape” Fagan quotes Mumford's view on urbanism.

– <sup>222</sup> Fagan has four Mumford books in his library: *The myth of the machine*, *The condition of man*, *The culture of cities* and *The technics of civilization*. One could thus argue a more direct influence.

So, you can learn about architecture wherever you perceive the lesson. But a truth absorbed and experienced locally is obviously better than one learnt vicariously through a magazine or cursory tourist visit, as the local precedent has already been honed by your climate and culture (Fagan, 1996:6).

Lefaivre and Tzonis (2003:35-39) outline five principles that form Mumford's definition of regionalism. These have been gleaned from a variety of Mumford sources namely, *Sticks and Stones* (1924), *Technics and Civilization* (1934), *The South in Architecture* (1941), *Report on Honolulu* (1945), *The City in History* (1961) and *The Urban Prospect* (1968). The principles reflect the approaches that Fagan has unconsciously adapted.

*The first principle recognizes that a relative regionalism needs to break with older forms of regionalism to prevent a nostalgic and historicist representation of tradition.*

In the beginning of this chapter Fagan's interpretative and replicative approach to the Cape tradition was outlined. His regionalist approach does not necessarily 'break' with tradition but rejects a facile use of the vernacular. Fagan has suggested that,

... regionalism, by its very definition, as it presupposes a thorough understanding and appreciation of local architecture, should avoid the easy clichés, and at the same time be socio-culturally orientated (Fagan, 1985:1).

Fagan reiterates the dangers of a scenographic regionalism:

Now this does not mean reviving the trappings of bygone or any styles to today's buildings – nothing is more pathetic than the pseudo Cape Dutch, Georgian, American Colonial, Spanish and now Sardinian of our so-called better suburbs (Fagan, 1972:1).

Similar regionalist approaches that rely on a deeper understanding of tradition can be seen in the work of Fagan's teachers like Norman Eaton and later friends like Barrie Biermann, who subscribed to a catalytic approach to tradition as espoused by Tange, where precedent acts in such a way that it is no longer detectable in the final result (Fagan, 1985:2). Fagan's house Die Es (1965) best represents Mumford's plea for a non-historicist view for architecture. The chimney is the only replicative feature, albeit exaggerated, while the rest of the building reflects tradition only through its plastic and honesty in the use of materials (see Fig. 7.41).



**Figure 7.41.** Die Es (1965): Chimney; in-situ concrete first floor, timber treads and Japanese fishing buoy as lamp; quarry tile stairs leading to basement (Photo's courtesy of Auret, 2006).

*The second principle suggests that architecture should reject a picturesque view of the landscape by recognizing the realities and conditions of modern life. Mumford argues for the landscape to act not only as genius loci but also as a resource of the human spirit. His thrust was an early development of the principles of sustainability.*

Fagan has mediated the dual concerns of local context and programme through a critique of universalism. He asserts that our approach should be “an architecture of our technology and our varying ways of living – not an international architecture” (Fagan, 1972:2).

Fagan reiterates this stance in his references to cultural practices through ways of living:

This very matter of definition was much debated at the first international seminar on Regionalism, held in Los Angeles in 1989. It was seen "not as so often imagined, as something vernacular, sentimental, picturesque or local, but rather as an attitude or approach, critical by nature ... (which) demands that the everyday is considered and freshly understood and that culture and the environment form the basis of its value systems" (Fagan, 1996:8).

Fagan has designed his houses to respond directly to three aspects of the landscape. These are the topography, the climatic elements and the *genius loci*. But Fagan mediates a picturesque view with a pragmatic one by designing strong statements in the landscape that are tempered in their dominance by a direct linkage to the landscape (often through partial submergence), through orientation of spaces towards view, light and sun where appropriate, and a consideration for how the buildings are viewed from the surroundings. House Swanepoel in Hermanus (1990) (see Fig. 7.42) is a formal mediation of a full programme and a very tight site, but fulfils the client's brief for a holiday house admirably. The house reads as a singular statement, turns the corner

sympathetically and orientates bedroom and living spaces to the northern sun, and the main living area towards the predominant sea view. House Auldearn (1992) was designed with a view to establishing an integrated and horizontal relationship with the surrounding hills in stark contrast to Fagan's other work. He has remarked (2008c) that an object building would have looked out of place in this landscape<sup>223</sup>.



Figure 7.42. Street view of House Swanepoel at Hermanus (1990) (Author, 2008).

*Thirdly, architecture should not be dismissive of the 'machine' as long as the result is sustainable and functionally optimal.*

Fagan (1985:1) admits the inadequacies of globalised Modern Movement responses:

So an international architecture proved environmentally unsuitable, and tenable only in the well-tempered mechanically serviced form.

But he recognises traditional methods to provide comfortable indoor climates:

Historically, buildings were designed to fit their microclimates and to make the best possible use of natural cooling. In the early twentieth century, however, cheap energy and international architectural fashion led to the widespread use of mechanical cooling systems (Anon, 1991:18).

Fagan does not, however, deny the advantages of the 'machine' and (1972:2) argues that

... we must use technology to produce our own vernacular - an architecture where man who lives in the house is part of the design process.

Fagan responds to microclimatic conditions to create comfortable indoor climates through natural ventilation, solar gain through windows, strategically placed rooflights and cooling through thermal mass and roof overhangs such as those calculated for House Beyers (1998). Spaces between roof rafters such as at House Keurbos (1951) are often filled with sliding glass panels to allow high level ventilation. Roofs are raised and separated to provide fresh air and light such as at House

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– <sup>223</sup> Fagan has indicated that he designed the house by sitting on a neighbouring hill looking across to the site.

Swanepoel in Cape St. Francis (1980) and House Raynham (1967). Die Es (1965) faces directly west and Fagan has noted (1985:14) that the 400mm thick walls and 266mm thick concrete slabs together with sliding shutters (see Fig. 7.43) provide a heavy heat sink. Solar protection is most often provided by the sliding shutter, a modern day interpretation of the traditional hinged shutter. These are not unlike those used by Eileen Gray<sup>224</sup> (1878-1976) in her own house Lou Pérou, built outside Saint-Tropez between 1954 and 1961 (see Fig. 7.43). In House Swanepoel (1990) Fagan uses motorised blinds under the main courtyard rooflight. 'Machine' type technologies are often allied with those of yacht building and can be seen in the detailing of column junctions at Houses Keurbos (1951) and Mitchell (2005). Fagan exploits the possibilities of large glass planes to form bigger openings that were not possible in the days of old.



**Figure 7.43.** **Top left:** Section and plan of House Beyers (1998) showing sun angles for mid winter and summer (Fagan archive - Job No. 9814, undated). **Top middle:** Sliding shutter to window of Eileen Gray's House Lou Perou (1954-1961) (Constant, 2007:194). **Top right:** West elevation of Die Es (1965) showing sliding shutters to first floor (Photos courtesy of Auret, 2006). **Bottom first three from left:** Yacht type connections to timber columns in House Keurbos (1951) (Author, 2008). **Bottom second two from right:** Machined timber connections in House Mitchell (2005) (Author, 2009).

*Fourthly, Mumford argued that architecture was not merely shelter but that it expressed the ideals of a particular age and people. His plea for a multi-cultural community was in part a reaction to nationalistic tendencies, but was also for a heterogeneity of response that would enliven traditional architecture.*

After the formation of the Union of South Africa in 1910, many Transvaal architects like Moerdijk and Eaton began the search for an African architectural identity. Subsequent architects like

— <sup>224</sup> See Appendix J.



Biermann and Fagan have argued for

... a return to basic human values, and an enabling architecture adapted to our climes and cultures and above all, that could restore the self-esteem of our nation (Fagan, 1996:10).

South Africa is a large country with disparate climates and an array of indigenous cultures aptly described by Cole Bowen:

South Africa is a country of highlights and shadows, of mountains and plains, of fertile valleys and deserts, of heat and cold, of flood and drought, of barrenness and fecundity – civilisation and barbarity. It is a country of infinite gradations of beauty, a country of breadth and depth and height, whose perspectives are interwoven with an intricate cross-texture of credes (sic) and cultures and colours – and it speaks with many tongues – in idioms and dialects and languages, with an intensity and volume ...

Fagan too has highlighted the extremes of climate and culture:

Ladies and gentlemen, this seminar concerns an architectural language (if we are to use the borrowed term) appropriate to Southern Africa. But as we are reminded in Nkosi Sikelele'i - Afrika (sic), we ask God's blessing on a land of many peoples, with many climates and cultures: what is right for the Mediterranean Cape with over three centuries of European settlement could be insufferable luxuriance in Natal, and inappropriate on the open Highveld. An appropriate Southern African architecture will thus by its very definition, show strong regional differences reflecting these cultural and climatic variants. My first language is Afrikaans – once endemic to the Cape – and I would not find it amiss if it could also be said of the architectural language towards which some of us are feeling our way – that it belongs and is appropriate to the Cape (Fagan, 1983b:1).

Marshall and Kearney (2000:118) note that the architectural heritage of the Cape forms an important part of Afrikaner cultural identity. Fagan has created a regional architectural response through his alliance with a particular community, that of the Dutch colonialists and their adaptations of European architecture in the Mediterranean climate of the Cape. His Afrikaner heritage has drawn him to this precedent and it can be argued that if he had based himself elsewhere in the country a completely different aesthetic would have arisen. Early examples of this are witnessed in the various Volkskas Bank buildings erected in the 1950s.

But especially, that the men who determined the destiny of architecture, were a part of and identified themselves with the communities they served. They worked closely within their building traditions transforming the spiritual value and often the structural potential of those traditions. They were all working with the essential stuff of which architecture is made. And they would all have pleased Vitruvius, uniting both skill and theory, "like all men equipped in 'full armour'." (Fagan, 1991b:9).

*Fifthly (and probably most importantly), Mumford did not see architecture as resisting the universal. He saw architecture mediating between the concerns of the local and the global to prevent a stagnancy of tradition but also to ensure a retention of local integrity.*

Equally well I can understand Leon van Schaik's fears in 1986 when political suppression was at its height, that Regionalism "as a slogan encompasses attitudes of great danger to architectural thought here and now." His real problem was rightly with political abuse, but his supporting argument that the universal in culture overrides adaptation to the particular, was an irrelevant academic argument – unless you accept a narrow definition of Regionalism that excludes the universal (Fagan, 1996:7).

Fagan recognises that the universal plays an important role in the development of a regional architecture. The first section of this chapter describes in detail how Fagan has developed a fourth vernacular through the assimilation of Modern Movement influences. His adoption of the open plan to suit new ways of living has been reconciled with the traditional cellular house plan. His use of 'machine' technologies has, for instance, extended the age-old tradition of the hinged shutter and transformed pitched roof forms into floating plastic expressions such as at Die Es (1965) (see Fig. 7.44) and Houses Raynham (1967) and Swanepoel in Cape St. Francis (1980).



**Figure 7.44.** View of Die Es (1965) chimney showing plasticity of finish and form (Photo courtesy of Auret, 2006).

#### 7.3.4. Summary

Fagan's design philosophies have been formed from mediations of the first Cape vernacular, Modern Movement principles and regionalist practices.

His synergy of these influences has resulted in the development of a fourth Cape vernacular in which he uses both replicative and interpretative design strategies to mediate the polarities of the rational and the corporeal, familiarity and strangeness, and new and old. He produces a new architecture that builds on a set of ten principles "learnt from the vernacular". These are all framed with "dignity and fitness for purpose" in mind.

Fagan has mediated orthodox Modern Movement influences with those of the third Modern Movement in South Africa to produce a fourth strain of modernism. This reflective modernism mediates the polarities of the universal and the local, economy and spirituality, modern and traditional spatial typologies, technology and craft, and background and foreground approaches.

Fagan's relative regionalist approach has been formed through lifelong exposure to varying contexts. His childhood exploits, regional-modern university education, bank design in far-flung regions of the country and conservation work have all sensitised him to the effects of climate and its reactions with natural elements. Fagan's philosophies most closely align with those of Mumford in their common criticism of tradition and modernity and their support for an architecture that is 'both-and' and not 'either-or'.