

HETEROTROPHIC SYNTHESES

MEDIATION IN THE DOMESTIC ARCHITECTURE OF
GABRIËL (GAWIE) FAGAN



Submitted

by

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– ¹ Fagan at his desk in his office at 156 Bree Street, Cape Town (Author, 2008).

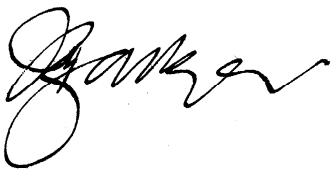
DECLARATION

In accordance with Regulation (4e) of the General Regulations (G.57) for dissertations and theses, I declare that this thesis, which I hereby submit for the degree Philosophiae Doctor in Architecture in the Department of Architecture in the Faculty of Engineering, Built Environment and Information Technology at the University of Pretoria is my own work and has not been previously submitted by me for a degree at this or any other tertiary institution.

I further state that no part of my thesis has already been, or is currently being, submitted for any such degree, diploma or other qualification.

I further declare that this thesis is substantially my own work. Where reference is made to the works of others, the extent to which that work has been used is indicated and fully acknowledged in the text and lists of references.

The thesis is 146 422 words long, including appendices and excluding scanned items.



Arthur Barker (May 2012)

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– ²Emeritus prof. Roger Fisher (1951 -) joined the Architecture Department at the University of Pretoria in 1986 and retired in 2009. In 2010 he was the recipient of the Writers and Critics Award from the South African Institute of Architects recognising years of writing extensively on South African architecture.

– ³Prof. Joubert (1959 -) was head of the Department of Architecture at the University of Pretoria from 2004 to 2008 and prior to this, head at the University of the Free State, also for four years. In 2008 she invited me to teach in the Masters and first year programmes on a part-time basis.

– ⁴Prof. Bakker (1956 -) became head of the Department of Architecture at the University of Pretoria at the end of 2008.

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ABSTRACT OF THE STUDY

Heterotrophic syntheses: mediation in the domestic architecture of Gabriël (Gawie) Fagan.

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This study will undertake a critical analysis of the domestic architecture of Gawie Fagan so as to define its uniqueness in the South African architectural landscape, and the contribution the architect has made to the establishment of a place-specific architecture that is nationally and internationally recognized. It will attempt to increase the limited written knowledge of the work of South African architects and to add to the critical debate on South African architecture.

The study will employ both descriptive and normative approaches as the built work and writings of Fagan are unpacked. This will be done through an analysis of the dichotomies, tensions and mediations that exist in his architecture. It will demonstrate that there are heterotrophic and typological tendencies present in his domestic oeuvre and that they represent a unique synthesis of the local Cape vernacular and aspects of the Modern Movement. It will attempt to provide a clear understanding of the man and his philosophies and through this process will add to the critical debate on South African architecture.

Fagan's work will firstly be contextualized, after which an analysis will be undertaken to determine how external and internal influences have impacted on the design of his houses and how these have contributed to the development of a unique South African architecture.

Key words: vernacular, Modern Movement, regionalism, heterotrophia, mediation, attenuation.

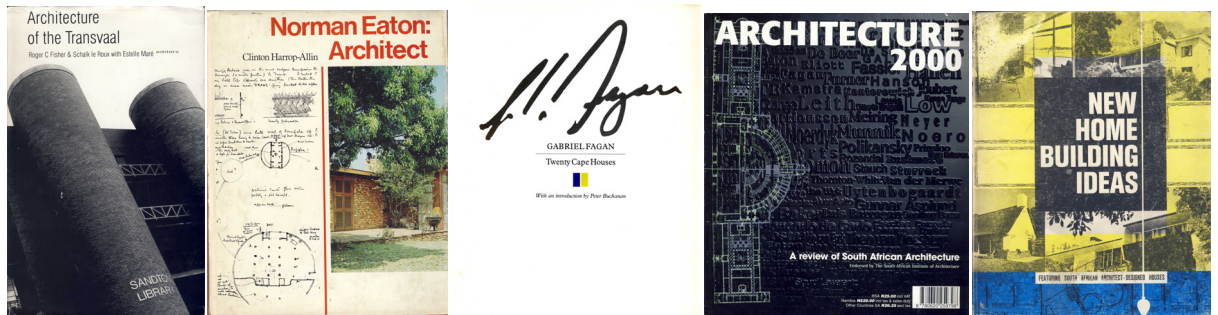
SECTION A

PRELUDE

This section introduces the study, its constituent parts and describes the methodology for the assessment of Fagan's domestic architecture

Chapter 1

INTRODUCTION AND PROPOSAL



Architecture of the Transvaal (Fisher et al. 1998). *Norman Eaton: architect* (Harrop-Allin, 1975). *Twenty Cape houses* (Fagan, 2005). *Architecture 2000* (Prinsloo, 2000). *New Home Building Ideas* (Wale, c. 1964).

This chapter sets the scene for the study:

The architect Gawie Fagan will be introduced.

The context of the problem will be outlined.

The problem statement will be set.

Assumptions will be stated.

The research strategy will be argued.

Delimitations will be justified.

Terms will be explained.

The importance of the study will be motivated.

1.1 Introduction

The domestic architecture of Gabriël (Gawie) Fagan, an architect based in Cape Town, South Africa, is a unique heterotrophic¹ synthesis of the principles of Cape vernacular architecture² and Modern Movement³ (see Fig.1.1) attitudes to function and space making, following a 'regional-modern'⁴ architectural education. It forms a new architectural language that expresses mediated typological transformations of its informants.



Figure 1.1. Left: Cape vernacular architecture (Fagan, 2012b). Right: Villa Savoye (1928) at Poissy by Le Corbusier representing the epitome of Modern Movement expression (Author, 1989).

It is not architecture at rest. It does not rely on a homotopic⁵ formality or a rigid reinterpretation of vernacular or Modern Movement typologies. It is suffused with tensions, contradictions and syntheses and expresses a formal hybridity. Fagan's architecture represents a unique synthesis, a quality rarely encountered in the history of South Africa's built environment.

An analysis and critique of Fagan's domestic architecture is necessary to bring to the fore the unique contribution that he has made to the discipline of architecture in South Africa.

1.2 Problem context

Gabriel (Gawie) Fagan was born in Newlands, Cape Town, South Africa on 25 November 1925.

– ¹ In a biological sense, heterotrophic organisms have to make use of partially synthesized ingredients from other simpler organisms to build up their body constituents (Bullock & Stallybrass, 1986:47). See Chapter 2 for a more detailed explanation.

– ² See Chapter 3.

– ³ See Chapter 4 for more detail on this definition.

– ⁴ The architecture school at the University of Pretoria was established in 1943, and developed a regionalist stance to architectural teaching in contrast to the orthodox modernist teachings of the University of the Witwatersrand (Wits) architecture school in Johannesburg.

– ⁵ Porphyrios (1982:2) defines homotopia as "establishing the frontiers of an uninterrupted continuity".

He has been a practising architect for more than sixty years⁶, has a portfolio of over five hundred projects and has received more than twenty-five awards for his work⁷. His work has also been widely published both nationally and internationally.

Op vakgebied presteer Gawie Fagan in veral drie opsigte: as vernuwer met gewaagde nuwe ontwerprigtings; as aanpasser van nuwe ontwerpe by bestaande bouwerk, en as hersteller van behoudenswaardige geboue (Biermann, 1975:1).

[Fagan excels in his profession in three areas particularly: as an innovator of new and risky design directions; as an adapter of new designs to existing buildings; and as a restorer of conservation worthy buildings].

In a newspaper report⁸ Fagan's wife Gwen (see Chapter 6.2.2) noted (with reservations) that Peter Buchanan⁹ regards Fagan's own house in Camps Bay, Die Es (1965) (see Fig 1.2), as being one of the best buildings of the 20th century. After a visit to Die Es with his University of Cape Town students in 1970, Lindsay Falck (1970:1), now professor of architecture at the University of Pennsylvania, remarked as follows:

For me it is always a breath of fresh air- and a jog - to my conscience to come out and see what you have achieved, I would have to go a very long way to see a finer main living space or standard of individual craftsmanship in such smaller things as the closet doors, etc.



Figure 1.2. Die Es, Camps Bay, Cape Town (1965): street and garden views (Author, 2009).

Buchanan (2006:48) notes that Fagan's architecture

... belongs to the Cape more profoundly than that of any other architect. Informed by his deep knowledge and love of the Cape, it grows from its landscapes, climate, history and culture. His own home, Die Es in Camps Bay, is a masterful

– ⁶ Fifty of these years in his birthplace, Cape Town.

– ⁷ See Appendix C.

– ⁸ Die Burger, Friday 25 July 2008.

– ⁹ An international author and critic for the Architectural Review worked for Fagan after completing his studies at the University of Cape Town.

demonstration of just this and, as a convincing synthesis of modernity and local tradition, is an exemplar for others to follow.

Fagan's work is certainly internationally recognized, as witnessed in his 2008 trip to Boston to receive honorary membership of the American Institute of Architects¹⁰, and the numerous articles that have been published in international journals like *Casa da Arbitare*¹¹, *The Architectural Review*¹², *AV Monographs*¹³, *Architektur, Innenarchitektur*, and *Technischer Ausbau*¹⁴. In the 1985 UIA International Architect publication on Southern Africa, Beck (1985:48) noted that Fagan's Camps Bay house

... relies on 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.

Architecture South Africa, the official journal of the South African Institute for Architecture, supports this view:

Like so many gifted architects, he has certainly been regional, yet enjoys an international esteem (Pretorius & Raman, 2006:50).

Fagan's architecture is firmly rooted in time and place. It does not attempt to self-consciously create a regional South African architecture, but presents a new understanding and interpretation of Cape vernacular architecture together with Modern Movement attitudes to function and space making.

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).

1.3 Problem Statement

The main problem entails a critical analysis of Fagan's domestic architecture so as to define its uniqueness in the South African architectural landscape, and the contribution the architect has made to the establishment of a place-specific architecture that is nationally and internationally recognized.

– ¹⁰ Die Burger, Saturday 3 May, 2008; see Appendix D for letters of nomination.

– ¹¹ April 2004, p. 98-109.

– ¹² March 1995, p. 79-81.

– ¹³ Issue 108, July/August 2004, p. 34-37.

– ¹⁴ Issue 1-2, 2007, p. 140-144.

South Africa has produced few architects who have achieved international prominence or have produced seminal work that has been published internationally. Similarly, there are few published examples of critical evaluations of the body of South African architects' work and

... much of the historiography needs urgent revision to bring it in line with current discourses of space (Fisher *et al*, 2003: 74).

There are very few up-to-date publications on South African architecture available (Fisher *et al*, 1998:74).

Gilbert Herbert's doctorate and subsequent book on the work of Rex Martienssen¹⁵ (1905-1942) and Clinton Harrop-Allin's record of the work of Norman Eaton¹⁶ (1902-1966)¹⁷ are the only non-autobiographical sources that attempt to investigate the life and work of seminal South African architects. These publications date from the 1970s and little in the same vein has been written subsequently, save for a self-publication by Revel Fox¹⁸ (1924-2004), an Italian publication on the work of Roelof Uytendogaardt¹⁹ (Vio, 2006) and a 2010 publication by Jo Noero²⁰ on his own work. A very recent monograph on the work of Adèle Naudé Santos (1938-) and Antonio de Souza Santos²¹ is a welcome contribution, specifically to the legacy of Modern Movement influence in South Africa. In this publication the architects describe their intentions in an introductory essay, and prof. Lucien le Grange²² provides a limited contextual summary. However, the descriptions of the houses are limited in their critical content.

There are also few architects in South Africa that have consistently won awards for their work and fewer even that have managed to do so for over fifty years. Fagan²³ is one such architect. His work is not well researched and although a self-publication, *Twenty Cape Houses*, was released in 2005, it contains a limited descriptive text that does not contextualise or critique his domestic architecture. It also does not tell us about the life of this seminal architect or his influences and philosophies.

All the architectural ideas, theoretical positions, inspirations, influences and

– ¹⁵ See Appendix J.

– ¹⁶ See Appendix J.

– ¹⁷ Herbert's book is more critical in its evaluation while Harrop-Allin's is more descriptive.

– ¹⁸ See Appendix J.

– ¹⁹ See Appendix J.

– ²⁰ See Appendix J.

– ²¹ See Appendix J.

– ²² Prof. Le Grange was a member of staff of the Department of Architecture at the University of Cape Town

– ²³ Fagan has received sixteen Awards of Merit and a Gold Medal from the South African Institute of Architects, as well as four Gold Medals from other national bodies, a State President's Gold Award, two honorary doctorates, honorary membership of the American Institute of Architects, and three sports awards, amongst others. See Appendix C for a full summary of awards.

contemporary reassessments are left for the reader to speculate about. The book does not give interpretation, it asks for it (Wolff, 2006:5).

The book makes light of questions of his identity, glossing over the rich biographical opportunities to critically contextualize his background and strongly held social, cultural and political convictions (Murray, 2006:57).

Indeed, Fagan (1983c:50) has himself noted that “I have seldom bothered to document my own finished work – nor has anybody else”.

This study will attempt to address the lack of critical enquiry into Fagan's work through an analysis of the dichotomies, tensions and mediations that exist in his architecture. It will demonstrate that there are heterotrophic and typological tendencies present in the domestic oeuvre and that they represent a unique synthesis of the local Cape vernacular and aspects of the Modern Movement. It will attempt to provide a clear understanding of the man and his philosophies and through this process will add to the critical debate on South African architecture.

Fagan's work will firstly be contextualized, after which an analysis will be undertaken to determine how external and internal influences have impacted on the design of his houses and how these have contributed to the development of a unique South African architecture.

1.4 Assumptions

1.4.1 The first assumption is that no current critical analysis of Fagan's domestic architecture exists.

1.4.2 The second assumption is that Fagan's domestic architecture has not yet been accurately analysed in relation to international and South African architectural history.

1.4.3 The third assumption is that Fagan's domestic architecture has not yet been analysed as an entire body of work. This process would be important in order to identify trends, patterns and developments.

1.4.4 The fourth assumption is that the current limited publications on Fagan's domestic architecture are not critical, do not clearly identify influences nor explain the development of a seminal architectural vocabulary.

1.5 Research Strategy

The study will employ both descriptive and normative approaches. It will be descriptive in the sense that it will "gather knowledge about the objects of study but avoid trying to bring about any changes in the objects"²⁴.

The study will be normative in the sense that it will try to bring about a change in *comprehension* of the architecture under scrutiny and will thus be qualitative in nature. Fagan's domestic architecture will be contextualised in terms of both national and international theory that specifically focuses on regional-modern standpoints, as Fagan's architecture demonstrates similar attitudes to context and form making²⁵. The study will also be intensive in that it will limit the number of case studies to Fagan's domestic oeuvre as "houses represent a consistent scale and functional typology where patterns can more easily be discerned" (Atkins, 2008: 135), while "the individual architect-designed house is a distinct category of artistic and cultural production" (Davies, 2006:10).

The study will need to be iterative as pertinent facts might be difficult to collect until enough buildings have been analysed²⁶. Blundell Jones remarks (1995:6) in his preface to the study on Hans Scharoun that it would be better if architectural studies moved away from a 'laws and instances' view of things towards a 'cases and interpretations' one. This study will not exclude the former but will rather try to establish a more critical connection between the two research approaches.

As Fagan's work demonstrates typological traits as well as inherent dichotomies and contradictions, an analytical strategy will be developed to explain these tendencies.

Various sub-problems have been identified (see below). These problems present hypotheses that need to be investigated and are focussed on through:

- contextualizing the architect's work within a broader international and national architectural framework;
- understanding Fagan's influences and the resultant philosophies that have created his architectural responses; and
- deciphering and describing the architectural responses.

The research strategy to be used is noted under each section stating the problem and

– ²⁴ [http://www2.uiah.fi/projects/metodi/144.htm\(6of14\)](http://www2.uiah.fi/projects/metodi/144.htm(6of14)) [Accessed 2008/07/14].

– ²⁵ The connections lie in the Modern Movement attitudes towards space making and function with the resultant form responding to these concerns as well as to a contextual bias and vernacular 'sympathy'.

– ²⁶ [http://www2.uiah.fi/projects/metodi/144.htm\(4of14\)](http://www2.uiah.fi/projects/metodi/144.htm(4of14)) [Accessed 2008/07/14].

hypothesis.

1.5.1 Problem One (Chapter 2: PREPARATION)

1.5.1.1. Problem One:

What analytical framework will be used to describe Fagan's philosophical and architectural responses?

1.5.1.2. Hypothesis One:

Fagan's domestic architecture mediates between architectural dichotomies and relies on a typological approach that exhibits formal and spatial tensions. The architecture can be described as heterotrophic and attenuative.

1.5.1.3. Research Strategy One:

A literature review of the work of architects who have demonstrated similar architectural responses will be undertaken. Critical writings such as Peter Blundell Jones on Hans Scharoun, Dimitri Porphyrios on Alvar Aalto and David Underwood on Oscar Niemeyer, amongst others, will be analysed. A theoretical enquiry into typological architecture in history will be completed. The concept of heterotrophia as a valid way of analysing Fagan's work will be described. The possibilities for attenuative and mediative design approaches will also be described.

1.5.2 Problem Two (SECTION B: CONTEXTUALISATION)

1.5.2.1. Problem Two:

How will Fagan's architecture be contextualised?

1.5.2.2. Hypothesis Two:

The domestic architecture of Fagan displays similarities to international examples of regional modernism. It exhibits linkages with post-Second World War regional-modern attitudes in South Africa as well as close similarities to a 1950s and 1960s neo-vernacular in the Cape region.

1.5.2.3. Research Strategy Two:

A literature review will define the terms 'vernacular', 'Modern Movement' and 'regionalism' and will outline the development of these approaches internationally and locally. Through argument a series of architectural responses to these approaches will be described.

1.5.3 Problem Three (Chapter 3: INITIATIONS)

1.5.3.1. Problem Three:

Which aspects (personalities, activities, events) have influenced Fagan's architectural responses over time?

1.5.3.2. Hypothesis Three:

Important influences such as upbringing, education and experience impact on the development of philosophies or architectural approaches.

1.5.3.3. Research Strategy Three:

Information about Fagan's influences will be directly gleaned from interviews with the architect and an analysis of his writings. Interviews with his family, colleagues, fellow professionals, clients and staff will provide indirect information regarding his life and philosophies. The interviews will be conducted according to a consistent interview structure. The list of questions will be sent to the interviewee before the meeting and the conversations will be digitally recorded. Other indirect information will be sourced through existing written critiques of Fagan's work and the limited descriptions of his life that are available.

1.5.4 Problem Four (Chapter 7: DESIGN PHILOSOPHIES)

1.5.4.1. Problem Four:

What architectural philosophies (theoretical or practical attitudes) has Fagan developed as responses to the inherited vernacular, the Modern Movement and regionalism?

1.5.4.2. Hypothesis Four:

Philosophies or attitudes lead to the development of architectural strategies and design approaches. It will be argued that Fagan has developed a fourth Cape vernacular, a reflective modernism and a relative regionalist approach in his architecture.

1.5.4.3. Research Strategy Four:

Literature reviews of critiques on Fagan's work, analyses of Fagan's public lectures, and published and built work will be used to explain Fagan's architectural approaches to the inherited vernacular, the Modern Movement and regionalism.

1.5.5 Problem Five (SECTION D: EXPRESSION)

1.5.5.1. Problem Five:

What is Fagan's design process? What is his approach to the development of architectural form? What have Fagan's architectural responses been over time?

1.5.5.2. Hypothesis Five:

Fagan's design process mediates between the polarities of intuitiveness and rationality. Fagan has developed architectural strategies to mediate formal, functional and spatial polarities generated by the principles of the inherited vernacular and modern day functional and technological requirements. He has developed a new set of architectural typologies.

1.5.5.3. Research Strategy Five:

A formal analysis of Fagan's houses will be undertaken to identify architectural mediations and the continuous development of new typologies. The architect will be interviewed and his writings analysed.

1.6 Delimitations of the study

The oeuvre of Fagan's architectural work is broad and extensive, ranging from conservation projects to new work and domestic to commercial and institutional buildings (see Fig. 1.3). The first twelve years of his career were spent as in-house architect for the then, Volkskas²⁷ Bank, designing and building new bank buildings and making alterations to existing structures. Conservation projects, including the restoration of main street Tulbagh after the earthquakes of 1969 and the Castle in Cape Town, form a large part of Fagan's work. Hostels, university architecture and commercial work are interspersed with seminal domestic buildings. These houses span Fagan's entire career and therefore present a continuum of work that can be critically analysed in terms of time-place, place-form responses (Frampton, 1992a:4) and formal and functional patterns.



Figure 1.3. Other Fagan works. **From the left:** Volkskas Bank in Roodepoort (1959) (Author, 2008), Men's Residence (Helshoogte) Stellenbosch University (1970) (Author, 2009), Newlands Brewery alterations and additions (1993) (Author, 2009), model of a proposed tower block for the Fagans, Bree Street (2010) (Author, 2010).

Fagan's house for his parents and his own house 'set the pace' for future formal development and experimentation. Buchanan (2006:79) notes that "architects' houses have traditionally been

– ²⁷ Volkskas Bank was an Afrikaner bank founded in South Africa in 1934. It became a commercial bank in 1941.

a vehicle for critical self development”. Pretorius and Raman (2006:52) support this thesis: “... one’s own home provides the best vehicle for the representation of probity.”

Fagan’s own house, *Die Es* (1965), was designed relatively early in his career but notably twelve years after the completion of his parents’ house *Keurbos* (1951) in Bishopscourt, Cape Town. The design of *Die Es* could in fact be the result of the years of experimentation with Volkskas Bank buildings, but it certainly laid the foundation for the houses to come and has demonstrated that the ‘vehicle’ has been well ridden, tuned and looked after during the sixty year period that Fagan has been in practice.

The study will therefore concentrate on Fagan’s domestic oeuvre. Although the study will investigate regionalist tendencies in South African architecture and will locate Fagan’s work within this continuum, it will not propose strategies or possible philosophies for regional architecture.

1.7 Importance of the study

The 1950s to 1960s was an important period in South African architecture. The country was recovering from the economic effects of the Second World War and was in the throes of gaining independence from the United Kingdom. Architects continued to search for an architecture appropriate to modern living conditions and the local context. The limited influence of the Modern Movement had given way to regional inflections and in the Cape a seminal neo-vernacular emerged. Very little has been written about this time and this particular context. This study will attempt to fill that gap through a study of Fagan’s domestic architecture.

Historically, this study will contribute to a new understanding of the post-Second World War period, particularly in the Cape, and will contextualise Fagan’s domestic architecture.

Pedagogically, the study will provide an understanding of an architect’s design process and approaches which are important aspects for students of architecture.

In terms of literature, the study will contribute to the limited publications on architecture and architects in South Africa. The intention is to initiate a series of monographs on South African architects for the benefit of the architectural community, mainly locally, but also internationally.



Figure 1.4. No. 41 Milford Road, Plumstead (Author, 2010).

The author's interest in Fagan's architecture was sparked by a childhood experience of growing up next to a 1960s painted brickwork box house in Plumstead, Cape Town (see Fig. 1.4). The enduring tectonic qualities of rough white walls, quarry tiled floors and a display of introverted and extroverted spaces was in stark contrast to the surrounding suburban blight. A love of Cape architecture was also instilled by my mother²⁸ who pointed out buildings in the city and who took me on trips to Cape vernacular buildings, particularly in Stellenbosch and Cape Town. Here, at around 12 years old, I captured elements of this architecture on my first instamatic camera (see Fig. 1.5). These influences have remained ever present in my architecture. The enduring legacy of building and its close relationship to place and the tectonic, visual and spatial qualities of Cape vernacular architecture still, to this day, provide stimulation for new designs and research.



Figure 1.5. Photographs taken of Cape vernacular buildings in Stellenbosch (Author, 1973).

1.8 Structure of the study

The study has been divided into three sections, framed by two bookends. The first section, CONTEXTUALISATION, describes Fagan's work against the backdrop of the broader international and local architectural scene. The second section, EXPRESSION, is an analysis

– ²⁸ She was a housewife all her life with no particular creative pursuits. She did, however, instil a sense of pride and neatness in everything I did. There are also no architects in our family and only one uncle who was a script writer and researcher. It is still a mystery to me where my affinity and passion for architecture originated.

of his work, where design philosophies are explained and design typologies and mediative strategies are unpacked. The middle section, CRYSTALLIZATIONS, mediates the two bookends and explains influences on the architect. Various chapters make up the individual sections and can, effectively, stand alone as independent investigations. There is no separate literature survey section (save for a limited one in Chapter 2). Literature surveys are embedded in the content where they are most appropriately located.

SECTION A – PRELUDE

CHAPTER 1: Introduction and proposal

Introduction

Context of the problem

Problem statement

Assumptions

Research strategy

Delimitations of the study

Definition of terms

Importance of the study

CHAPTER 2: PREPARATION

SECTION B – CONTEXTUALIZATION

CHAPTER 3: VERNACULAR VARIATIONS

CHAPTER 4: MODERN MOVEMENT MEDIATIONS

CHAPTER 5: REGIONALIST REINTERPRETATIONS

SECTION C – CRYSTALLIZATION

CHAPTER 6: INITIATIONS – THE MAN AS MEDIATOR

CHAPTER 7: DESIGN DERIVATIONS

Fagan and the inherited vernacular

Fagan and the Modern Movement

Fagan and regionalism

SECTION D – EXPRESSION

CHAPTER 8: THE DESIGN PROCESS

CHAPTER 9: FORMAL TENSIONS AND MEDIATIONS

CHAPTER 10: (HETERO)TYPOLOGIES

SECTION E – FINALE

CHAPTER 11: CONCLUSIONS

CHAPTER 12: LIST OF REFERENCES

SECTION F – APPENDICES

CHAPTER 13:

APPENDIX A: Curricula Vitae of the architect and his wife

APPENDIX B: Family tree

APPENDIX C: Awards

APPENDIX D: Motivation letters for honorary membership of the American Institute of Architects

APPENDIX E: Domestic architecture project list summary

APPENDIX F: Data sheets of individual buildings

APPENDIX G: Student work

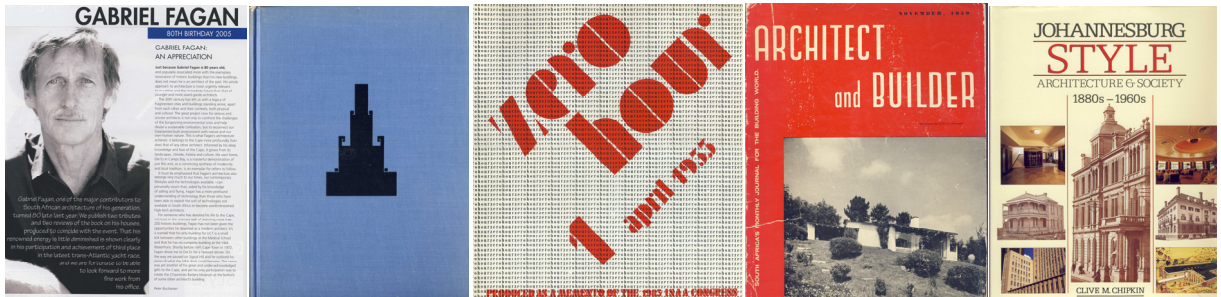
APPENDIX H: Fagan's library

APPENDIX I: Interview questions and Fagan's responses to email questions

APPENDIX J: Précised biographies of important personalities related to the study

APPENDIX K: External examiners' comments and author's responses

Chapter 2



Article on Gabriel Fagan in *Architecture South Africa* (Buchanan, 2006). *Practical applications of Dynamic Symmetry* cover (Hambidge, 1932). *zerohour*. Memento of the 1985 ISAA Congress (McIntosh, Hanson, and Martienssen, 1933). *Architect and Builder* November cover (Wale, 1959). *Johannesburg Style* cover (Chipkin, 1993).

This chapter outlines the methodology for the assessment of Gabriel Fagan's domestic architecture:

A limited literature survey of works by other architects that demonstrate similarities to Fagan's domestic architecture will be undertaken to elicit strategies for analysis.

The concepts of HETEROTROPHIA, MEDIATION and ATTENUATION will be introduced and explained.

An explanation of TYPOLOGICAL research strategies will be given.

2.1. Introduction

An architect's work can be evaluated according to a variety of criteria. First and foremost, one might easily assume, comes the question of whether the buildings work well for those who use them, but of course such buildings must also contribute to the surrounding landscape or city, and this may be equally important. Further, in the case of international figures, more than local significance is needed, for almost by definition complex questions are bound to arise about their contribution to history and to the general culture. Closely connected with this is the question of influence exerted on colleagues and younger members of the profession, for good or ill (Blundell Jones, 1995:218).

It has been suggested in Chapter 1 that the limited texts on Gabriël Fagan's work are descriptive rather than analytical. It will be argued that an interpretative investigation would be an appropriate mechanism to understand and explain his architecture. It will not, as Blundell Jones indicates, measure the functional success of the buildings but rather their genesis and development. An understanding of the architect, his influences and his creative abilities is also important for the study, as these aspects mediate design considerations to produce new architectural approaches.

2.2. Architects with similar approaches

In contrast to Le Corbusier and Wright little has been published about his ideas. Questions on theory are apt to receive the laconic reply 'I build'. But even if he does not explain his actions and admits to no theories a number of facts can be elucidated which are fundamental to it.

His relationship to technology is instinctive not deliberate. In this he is as disinclined to reject technical methods as to fall into half-baked rationalism. He exploits technical possibilities ... but they do not determine his aesthetic philosophy. His reaction to nature is similarly characteristic.

He avoids the dangers of a nature mystique and of a romantic and popular ideal-home style. He is equally free from the attitude of the 20s which, in man-made work, in the De Stijl sense, saw a counter reality to nature. He sees the works of nature and man as complementary, with buildings having their own independent place in this relationship.

His work is the direct reflection of a strong personality, single-minded, unreceptive to visionary notions and anchored to a philosophy of life which holds simple things supreme (Joedicke, 1969:64).



Figure 2.1. Left: Alvar Aalto (<http://mit81.com/baker/content/alvar-aalto> [Accessed: 12/04/2012]). Middle and right: Aalto's studio in Munkkiniemi, Helsinki, Finland (http://www.greatbuildings.com/cgi-bin/gbi.cgi/Aalto_Studio.html/cid_1136145171_3_13.html [Accessed 1/05/2012]).

The preceding description³³ of the neo-vernacular Modern Movement architect Alvar Aalto³⁴ (1889-1976) (See Fig 2.1) bears many striking similarities to the work of the octogenarian South African architect Gawie Fagan. Not much has been published³⁵ about Fagan's work, and that which has, does not provide critical insight. Fagan has built his own house, refurbished two yachts and partly completed the construction of a plane, which demonstrates a hands-on approach to making. These practical skills have engendered a technological inventiveness. He is reluctant to answer questions about his work and when he does they are framed pragmatically. No particular theoretical standpoint³⁶ is ever elucidated, but an appreciation of place and appropriateness for modern living are stated as important influences. He does, however, never fail to highlight his affinity for Cape vernacular architecture, his mediated Modern Movement training and the influence of his hero, Le Corbusier.

We were wildly excited by the emerging South American work of men like Niemeyer, but generally turned directly to his mentor Corbusier; buying and studying all his books as they appeared until we could walk blindfold through the Villa Savoye! (Fagan, 1983b:2).

It is these contrasting traditional and Modern Movement architectures that he manages to synergise into a new and appropriate architectural language, where man and nature co-exist in various forms and where the boundary conditions between opposing architectural approaches are mediated. The resulting architecture displays a tension inherent in resolving the conflict of dissimilar architectural precedents.

Fagan is certainly strong minded³⁷ and purposeful. The reflection that follows (Papadaki, 1950:13) is

³³ This description was shown to Fagan (without indicating who the piece was about) and he agreed with the sentiments.

³⁴ See Appendix J.

³⁵ See Chapter 1.3 for a more detailed explanation.

³⁶ Fagan has presented a number of lectures but the records exhibit a pragmatic architectural bias.

³⁷ Over the last year or so Fagan has been embroiled in a controversial proposal for an extension to the old grain storehouse

apt to describe Fagan:

Le Corbusier often used to say that talent was not enough if it could not be backed by a strong character.

Fagan is fully committed to his craft and at eighty-six years old he still works an eight hour day. He continues to reside in the house, Die Es, that he built for himself in the 1960s (see Fig 2.2). The well-worn bed with roughly hewn and differing bedside tables attest to his appreciation of the simple things in life. There are no fashionable furnishings, only functionally appropriate items, most still from the 1960s which indicates their physical durability. Fagan and his wife share each other's food³⁸. No new cars either, save for a dated Lancia and Alfa Romeo³⁹. Lunchtime leftovers are brought back to the office for the black toy poodle, Clara – nothing ever goes to waste (see Fig 2.2).



Figure 2.2. **Top left:** The Fagan's bedroom at Die Es (Author, 2008). **Top right:** Fagan residence, Die Es (Fagan archive, undated). **Bottom left:** Fagan's office at 156 Bree Street (Author, 2010). **Bottom middle:** Lancia and Alfa Romeo parked in Die Es carport (Author, 2008). **Bottom right:** Fagan feeding Clara after their midday meal at the yacht club in Cape Town's harbour (Author, 2012).

In his 2007 book *The other Tradition of Modern Architecture - the uncompleted project*, Colin St. John Wilson refers to a group of architects, such as Aalto and Sharoun, who attempted to resist the orthodoxy of the Modern Movement following the 1928 *Congrès Internationaux d'Architecture*

site adjacent to the Lutheran Church complex in Cape Town central business district. There has been a heated debate in the media but Fagan has stuck to his guns and is presently, with the client, taking legal action against decisions made by the City of Cape Town.

³⁸ The author witnessed this on a few occasions when invited to dinner with the Fagans.

³⁹ Fagan notes (2012) that it is the poor man's sports car.

(CIAM) meeting. They reacted against the formulaic nature of modernism and its failure to deal with the vagaries of human life (St. John Wilson, 2007:8). According to Porphyrrios (1982:2), Alvar Aalto developed a heterotopic architecture in opposition to the monotonous universal values of the modernist project. Heterotopic architecture aimed (amongst other intentions) “to destroy the continuity of syntax and to shatter the predictable modes of the homogenous grid”.

The resultant architecture spoke of difference, not sameness, and in a way pre-empted Venturi's retort to 'less in more' with 'less is a bore' and his call to employ architectural strategies of complexity and contradiction. Venturi's seminal publication, *Complexity and Contradiction in Architecture*,

... constituted polemical responses to the rejection of historical references common in American architectural culture in the 1960s. Venturi insisted that the adaptation of historical models, appropriately modified to serve contemporary needs, allowed the architect to develop designs richer in experiences, meaning and moods (Ghirado, 1996:130).

Unfortunately the eventual outcome of this Post-Modern polemic led to a scenographic design approach which spoke more of commodification than of a respect for historical tradition. In its later historicist phases it also tended to negate the positive aspects of the Modern Movement. Fagan has avoided these tendencies in his work by formulating design principles based on the original intentions of both local Cape architectural traditions and Modern Movement work.

Fagan's architectural approach is also similar to that of the Brazilian Oscar Niemeyer⁴⁰ (1907-) (see Fig. 2.3):

Architecture in Brazil, overcoming the stage of orthodox functionalism is now in search of plastic expression. It is the extreme malleability of present construction methods together with our instinctive love for the curve – a real affinity with the Baroque of our colonial times – which suggests the unfettered forms of a new and amazing plastic vocabulary based not on whim but on contemporary technology, creatively applied to the solution of spatial problems. A true architecture emerges – a real work of art (Papadaki, 1950:5).

– ⁴⁰ See Appendix J.

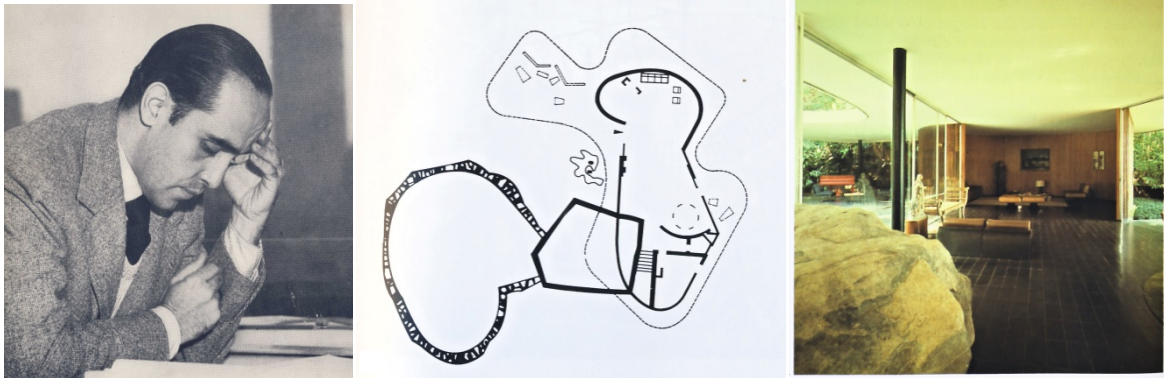


Figure 2.3. Top left: Oscar Niemeyer (Papadaki, 1950: inside cover). Middle and right: Plan and interior view of Niemeyer's Canoas house, Rio de Janeiro, 1953-4 (Curtis, 1996:499).

Niemeyer clearly articulates the direction of architecture in his home country. He notes the limitations (but not exclusion) of orthodox Modern Movement architecture and the possibilities inherent in the colonial tradition. He indicates a continued rational bias relying on technology and function as generators but reintroduces the notion of form in art and, it can be argued, in sculpture. Many parallels can once again be drawn with Fagan's approach. After his University of Pretoria education he grappled with the design of new banks in little towns in South Africa. Here he brought together the concerns of corporate expression, the influences of context in all its forms, and the functional organization of space which dealt with the vagaries of Apartheid legislation in an almost subversive manner. Fagan used Modern Movement design approaches and synergised these with local formal and technological traditions. Later, in the design of his houses, Fagan synergised modern ways of living with the plastic expression of the Cape vernacular.

Brazilian architect Oscar Niemeyer Soares Filho's seminal contribution to the history of modern architecture is unquestioned, yet a deeper understanding of his work has long been needed. Practicing for more than half a century, Niemeyer has become one of the world's most prolific, persistent, and polemical innovators of modernism and one of the few remaining champions of the heroic values that gave birth to this movement (Underwood, 1994:10).

Underwood's preface to *Oscar Niemeyer and the architecture of Brazil* stresses the inventive contribution that the Niemeyer has made to the Modern Movement. Although Fagan's contribution to South African architecture has been recognised through the award of a Gold Medal from the South African Institute of Architects, his contribution to the project of modernity has not been sufficiently appraised. A critical understanding of his work is still outstanding.

Fagan's development of a new architectural language, based on his mediated Modern Movement training and a respect for the Cape vernacular, is also similar to the approach of Portuguese architect Alvaro Siza⁴¹ (1933-) (See Fig. 2.4) who sought to temper the universalisation of orthodox

— ⁴¹ See Appendix J.

modernism in Portugal and to achieve an equilibrium between the local and the general (Curtis, 1996:483).

[Siza] has consistently revitalized the received modern repertoire by demonstrating the extent to which our available heritage may be conceived as a *repetition différente*, thereby breathing new life into old bones (Frampton, 1992a:1).



Figure 2.4. Left: Alvaro Siza (<http://www.builderasia.com/alvaro-siza/> [Accessed: 12/04/2012 12:08]). Right: Siza's Boa Nova restaurant in Porto, Portugal (Author, 2004).

Although Fagan's architecture attempts to diffuse orthodox Modern Movement influences it is certainly also not completely heterotopic. It does not attempt to shatter the "geometrical austerity of a severe and homogenous syntax" (Porphyrios, 1982:1). In fact, it accepts the language but fuses it with principles of the vernacular model, an approach which seems to build on the education that Fagan received at the University of Pretoria in the 1940s. At the time there was a shift in architectural education away from orthodox modernism to a more regionally expressive style that Roger Fisher has referred to as the third vernacular. Fagan's architecture is a new language⁴² that is born from an understanding of the simple principles⁴³ employed by the colonial settlers, but is tempered and informed by context, modern functional requirements and the possibilities of new technologies. Fagan believes

... a really thorough understanding of one's own vernacular architecture to be an essential and also the soundest basis, for continuing creation (Fagan, 1985:3),

and

I can hardly believe that architects like Charles Correa⁴⁴ needed any justification for responding to the climate and traditional architecture of India despite his American training. Nor Geoffrey Bawa⁴⁵ in his own poetic way to that of Sri Lanka, despite having studied in England (Fagan, 1996:9).

— ⁴² See Fagan's lecture entitled "Architectural Language" presented at the UCT Architectural Conference in Cape Town in 1983.

— ⁴³ See Chapter 3 for a detailed explanation of these principles.

— ⁴⁴ See Appendix J.

— ⁴⁵ See Appendix J.



Figure 2.5. Left: Garden view of Stauch's own house Hakahana to the West of Pretoria (1951) (Author, 2008). **Middle:** Interior view of guest bedrooms at Hakahana (Author, 2008). **Right:** Hellmut Stauch (Garden and Home, May 1969.)

In South Africa, Fagan's work seems to have continued in the vein of South African architects like Hellmut Stauch⁴⁶ (see Fig. 2.5) and Norman Eaton (see Fig. 2.6). In his later work, Eaton shifted away from the orthodoxy of the Modern Movement of the 1920s and 1930s and responded to the regionalist slant of Herbert Baker⁴⁷ (1862-1946) and Gordon Leith⁴⁸ (1886-1965) (Fisher *et al*, 1998:127). Eaton is said to have produced a "more rustic regionalist approach" (Fisher *et al*, 2003:69).



Figure 2.6. Left: Garden view of Eaton's van Wouw House in Pretoria (Author, 2008). **Middle:** Roof structure in attic study space in van Wouw house (Author, 2008). **Right:** Norman Eaton (<http://www.artefacts.co.za/main/Buildings/archframes.php?archid=450&countadd=0> [Accessed: 12/04/2012]).

In the then Transvaal, architects such as Cowin⁴⁹ (1911-?) created buildings that were reflective of both place and international influence, while in Durban Barrie Biermann⁵⁰ (1924-1991)

... synthesized the influence of the Modern Movement with his own research into the vernacular architecture of the Cape and interests in colonial and indigenous architecture (Sanders: 2005a:1).

In the Cape, the Bauhaus trained architect Pius Pahl⁵¹ (1909-2003) introduced an ordered Modern Movement syntax into many of the Stellenbosch houses that he designed. His work "is distinguished by principles of early modernism adapted to contextual conditions" (Prinsloo, 2000:88).

– ⁴⁶ See Appendix J.
– ⁴⁷ See Appendix J.
– ⁴⁸ See Appendix J.
– ⁴⁹ See Appendix J.
– ⁵⁰ See Appendix J.
– ⁵¹ See Appendix J.

Here white walls reminiscent of the vernacular were fused with the modernist flat roof and blurred inside–outside connections. But there was little variation in the size of external openings or articulation in planning, resulting in a rather monotonous spatial quality. Revel Fox (1924-2004) also attempted a regional expression in the 1950s and 1960s, particularly with his ‘Fox Boxes’ in Worcester. These closely followed the orthodox modern architecture of the Scandinavian Arne Jacobsen⁵² but contained limited local expression⁵³.

2.3. Possibilities for investigative approaches

Blundell Jones (1995:6) argues that to understand an architect's design approach

... the primary focus remains the architectural work, the ideas behind it and its development, rather than the architect's biography or his place in ... culture generally. ... At a time when 'isms' spring up like mushrooms, and the most preposterous castles of pure theory are assembled in the air, *case studies*⁵⁴ of particular designs do at least provide useful evidence to argue over. And if, as the anthropologist Clifford Geertz claims, there is a general move away from a 'laws and instances' view of things towards a 'cases and interpretations' one, I am all for it. Hopefully, a reconstructed history of the Modern Movement will emerge as the jigsaw puzzle of case studies is assembled.

As Fagan's architectural approach is more pragmatic and less theoretical, an investigation of his built work and writings will be an appropriate starting point for this study.

Underwood's study on Niemeyer describes the architect's entire career and frames his work in terms of his relationship to Brazilian society. It focuses on formal and contextual analyses of his work and concentrates on his stylistic evolution.

As Fagan's oeuvre is too large a study for this thesis only the domestic work will be focused on. The work will have to be contextualised but a mere formal and contextual analysis will not be adequate to position his approach. An analytical strategy will have to be developed after an initial investigation of the built works and writings.

Porphyrios's analysis of Aalto (1982:vii) in *Sources of Modern Eclecticism* starts with an apology but confirms Joedicke's description earlier in this chapter and also highlights the pragmatic bias of the architect:

Received opinion has it that Aalto was so humanely simple and straightforward, so

– ⁵² See Appendix J.

– ⁵³ See Chapter 3 for a detailed investigation of these approaches.

– ⁵⁴ My emphasis.

anti-intellectual and so practical a man that to embark on an analysis of his work would be but the misguided academic pedantry of a hair-splitting miser.

Porphyrios's purposeful critique of the semiotic attacks on Modern Movement architecture in the 1970s was intended to restore some dignity to the original intentions of the avant-garde. The first part is written non-thematically and concentrates on real examples and their classification to elicit a number of design categories. It avoids a symbolic interpretation of the work, staying true to the personal qualities of Aalto. In the second half of the book Porphyrios describes two contexts: the first is that from which the work emanated and which Aalto drew from, and the second is the context in which the work finally existed.

Fagan's pragmatic (yet haptic) approach to design necessitates a limited theoretical and more contextual analysis to be undertaken. Built work and writings will need to form the core of the investigation which will then generate further possibilities for examination.

A 'cases and interpretations' methodology structured within a contextual analytical approach will form the core of the study. The man and his influences, traits and abilities will be central to all the investigations and will stand as mediator between context and architecture.

2.4. Heterotrophia – a mediated typological synthesis

The first few visits to Fagan's houses left me with a sense of confusion. What was Fagan trying to express? Spatial and haptic qualities left one in awe. There was a contrast of visual and tactile and public and private. There were large spaces and extremely tight spaces. Internal and external relationships alternated in their definition. The houses felt old yet timeless, Cape yet Modern Movement. Certain formal and functional patterns were discernible. But the elements used to form the building were not of a singular palette. But there was limited aesthetic consistency and no easy logic to follow. The only way I could describe the architecture was schizophrenic. These initial thoughts led to a hypothesis that Fagan deliberately but seamlessly integrates two disparate architectures. Not a stagnant resolution but one of tension. I once asked him about my supposition while having dinner at his own house Die Es⁵⁵. In his usual non-committal manner to questions of design, he took me outside and pointed to a detail at the junction between wall and ground. It was something I had not noticed before and I quietly chided myself for not paying more attention. The wall was coved at its base, forming a seamless skirting into the ground. The 'floating box' was securely grounded (Author, 2008).

– ⁵⁵ Die Es reads as a building that hovers between earth and sky, belonging to both conditions at various points in its configuration.

The domestic oeuvre of Gabriël Fagan mediates between architectural dichotomies. It straddles universality and place. It is at once introverted and extroverted. It relates to the landscape both classically and romantically and in its making ranges from simple technology to sophisticated technique. Fagan's architecture is formed from aspects of vernacular architecture and mediated orthodox Modern Movement planning, resulting in a regional-modern interpretation. New synthesised typological transformations create a fresh and unexpected architecture, a new result in an old idiom, a new language for a new time.

The result of Fagan's mediative strategies is not a static architecture. It is also not a quiet resolution of contradictory influences but results in perpetual formal tension. The architecture is a result of a dialogue that deals with influences that exhibit commonalities and discontinuities. As Venturi (1988:41) argues, the architecture

accommodates the circumstantial contradictions of a complex reality. It accommodates as well as imposes. It thereby admits 'control and spontaneity,' 'correctness and ease' – improvisation within the whole. It tolerates qualifications and compromise.

Fagan's approach has resulted from a lifelong mediation of contradictory influences and experiences. Fagan's syntheses are not the result of a particular theoretical approach but are the consequence of a search for appropriate solutions to particular problems (Fagan, 2010a). They rely on a reinterpretation of and mediation between traditional and universal architectural typologies⁵⁶, influences that have permeated Fagan's education, architectural practice and life. They are probably informed, in part, by the similar attitude of Fagan's hero Le Corbusier whom Frampton (1992b:49) describes as

dialectical ... I am referring to that ever present play with opposites – with the contrast between solid and void, between light and dark, between Apollo and Medusa – [it] permeates his architecture and is evident as a habit of mind in most of his theoretical texts.

This dichotomy of approach is reinforced by Jencks (1985:141) when he cites the contradictions in Le Corbusier's life and work, such as geometric and biomorphic, peasant and urbanite, and part daemonic and part humane. These personal and professional dichotomies probably fuel the development of inventive architectural approaches, those that deal with complexity rather than simplicity.

Fagan (1991:1) has remarked that the complexities of design (particularly of the city) cannot be solved in simple terms. In *Vernacular design as a model system* Rapoport (2006:84) argues for the

– ⁵⁶ It must be noted here that at the core of much of the Modern Movement's search for new architectural forms was an interpretation of vernacular typologies to prevent a stagnancy of tradition. In this sense there are commonalities between the vernacular and the Modern Movement, but the formal result was in stark contrast to that of the traditional. Witness Le Corbusier's famous canonic diagram of the 'free plan' contrasted with that of the restrictive architecture of the past.

use of model systems to understand complex phenomena and cites the use of biological systems as an appropriate model for the study of vernacular architecture. Fagan employs a similar (but less theoretical) approach in his use of a biological analogy to describe how problems in the city should be tackled:

Firstly we must face up to the fact that the simplistic approach is doomed to repeated failure, and secondly avail ourselves of the fast developing techniques that account for the very recent advances in the life sciences. Biology for instance, deals with problems of organized complexity in probing the wonderfully complex interrelationships of the living body. The living body is neither simplistic, nor based on the other hand so unrelated in its parts as to lend itself to statistical techniques – which are however often wrongly used in analysing the living body of the city (Fagan, 1974:1).

To continue with the simple biological analogy, Fagan's design approach can be termed heterotrophic as it is formed from sources that are most often contradictory in nature. As Joedicke (1969:8) remarks: "The origin of a new vocabulary of form is a complex process, fed by many, and often heterogeneous sources." The term heterotrophic is a biological term that describes living organisms which "have to make use of partially synthesized ingredients from other simpler organisms" (Bullock & Stallybrass, 1977:47).

The word *hetero* is derived from the Greek *heteros* meaning 'different' or 'other' (when combined with other words), while *trophic* (*trophos* in Greek) means 'feeder'. As a Latin or Greek suffix '-ic' means 'state of', 'condition' of or even 'act of'. These meanings can be extended to architecture through an analogy of the new living organism (Fagan's domestic architectural language) being fed (created from and sustained by) other simpler organisms (oppositions or similarities), creating a new state (a different architectural solution) through a process of conversion and assimilation. The overall condition of the organism (the domestic architectural solution) remains constant but it changes its nature to suit varying conditions and influences.

All living organisms, individuals and species aspire to survival. The mechanisms used to sustain organisms depend on their capacity to adapt to changing local conditions, such as climate and the availability of resources, especially food (Lawrence, 2006:110).

It can be argued that the survival of architecture depends on continuity with the past⁵⁷ and appropriateness for the current condition. The human condition demands association and a sense of familiarity with its past to feel comfortable. To be sustainable⁵⁸, architectural approaches need to be reinvigorated through a process that makes sense of its original intentions by unpacking these as a series of lucid principles. A new architectural direction can then be formed, using current contextual conditions and requirements to mediate between the principles.

– ⁵⁷ No architecture will ever be 'new' and no architecture has ever started 'afresh'. Although the Modern Movement has been described as a tabula rasa approach it did not negate tradition itself, but rather the stagnant reinterpretation of it.

– ⁵⁸ Here 'sustainable' refers to its original meaning of providing sustenance and not the clichéd terminology of the last decade.

A quotation from T.S. Eliot's "The Wasteland" ... conveys this attitude: "Time present and Time past are both perhaps present in time future, And time future [is] contained in time past." Eliot said (in "Tradition and the Individual Talent") that tradition involves the historical sense, and the historical sense involves a perception, not only of the pastness of the past, but of its presence. If this attitude to tradition is accepted, our historical heritage can be conserved in a manner which is meaningful to our present lives, not merely an attractive adjunct to them (Adler, 1975:9).

2.5. Mediation and attenuation

Fagan's work mediates between architectural polarities and dichotomies and assimilates commonalities. The architecture of the houses he designed hovers between dialectic conditions. It is never a complete synergy or resolution. It reverberates with tension as it mediates its informants. A definition and analogy of, and structure for mediation will now be outlined.

The word 'mediate' is derived from the Latin *mediare*, meaning 'to be in the middle'. In philosophical terms mediation is the logic of an inference having more than one premise. In legal terms it refers to a negotiation between two irreconcilable parties. The process of mediation acts as a medium to obtain a result or settlement. It can be described as an open discussion, as a process of reconciliation involving compromise. The constituents of mediation are those aspects that need to be reconciled, the mediator (and his tools) who effects the reconciliation, and the result or settlement. It must be recognized that the result will reflect both commonalities and oppositions in the dispute.

These meanings can once again be extended to architecture through means of an analogy. Fagan is the mediator. His tools are his influences, his design talent and his imagination. His influences are constituted from two sources, the first being, internalized influences from his childhood, education and life experience, and the second being, externalized influences such as the architectural brief, the site conditions, available technologies and the client.

The process of mediation is affected firstly by Fagan's design approaches and secondly by the requirements and siting of any of his projects. The order is important here as Fagan's design approach is always uppermost in his mind⁵⁹. The result of the mediation is a new design and just as there is tension between two contesting parties after the outcome of a resolution, so there is in Fagan's architecture. The result allows all influences to be present, reflecting their commonalities but creating a new tensional solution. As the architectural historian Ronald Lewcock⁶⁰ (2006:203) points out when referring to Panofsky, there are

— ⁵⁹ For example, Fagan insists on a single powerful statement in the landscape.

— ⁶⁰ See Appendix J.

... two influences working on any new building, that of tradition on one side and conceptual thinking to create innovation and change on the other. What resulted was in some ways a compromise, but one that involved a clear direction.

The resolutions of the architectural polarities are not quiet or static. Although they express a recognition and assimilation of commonalities they reverberate with tension in an attenuative way.

The word 'attenuate' means to reduce in strength or value. It is derived from the Latin word *attenuare* meaning 'to make thinner'. In the analogy, the process of mediation attenuates the architectural influences so that neither takes a dominant position in the final result. Both influences are present but their position within the attenuation differs from project to project. As will be seen in Chapter 3, in Fagan's houses an attenuation of replicative and interpretative architectural elements is achieved in various ways. The inhabitant or visitor will visually associate with the building through connection with recognizable elements (such as the hearth), while experiential connections will be made haptically.

The study will show that Fagan mediates oppositions to achieve a unique design result, one that resonates with tension, allowing the oppositions to maintain their presence in an attenuated form. The resultant architecture then sits on an imaginary scale that links the extremes of the polarities. Depending on the circumstances of the project such as the clients' requirements or the context, Fagan will unconsciously choose polarities to reconcile and will then use various architectural approaches to mediate the dialectic condition. The text (the new building) can be read by the observer in more than one way while the author's hand maintains its presence. And it is this hand that has developed a new language, a recognizable handwriting of new and innovative typological strategies.

2.6. Typological concepts

Architectural typologies have been formulated and passed down in theoretical treatises and the work of famous architects. It is therefore legitimate to postulate the question of typology as a function of both the historical process of architecture and also of the thinking and working processes of individual architects (Argan, 1997:242).

The importance of typology lies in its relationship to the history of architecture and architectural ideas, and to the human aspect of association. It links therefore to an understanding of our traditions and their importance in our lives to give us a sense of continuity, connectedness or rootedness. Lewcock (2006:201) indicates that typologies and archetypes have meaning through their continued existence in our memory. An emotional trigger creates an association in our consciousness when we are faced with archetypes. These types of experiences are created

through a combination of genetically produced and learned processes.

Fagan's two main architectural influences, namely the Cape vernacular and a mediated Modern Movement, are formally typological⁶¹. The Cape tradition is a stereotomic and cellular linear box while the mediated Modern Movement typology is exemplified by local climatic manipulations of the canonic 'free plan' (see Fig. 2.7). Fagan has developed new typologies that rework and refine these influences through a process of mediation. The mediations are not reductive or simplistic interpretations of their antecedents. They mediate an understanding of the principles that generated the original typologies and the forms that have become associated with them.

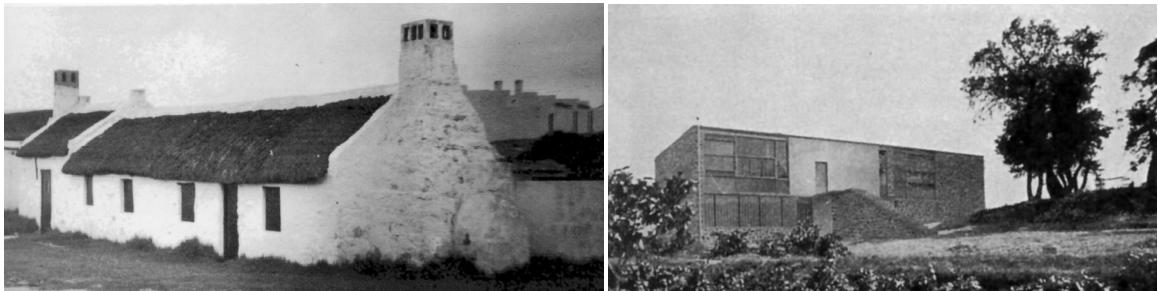


Figure 2.7. Left: Extended rectangular cottage at Waenhuiskrans (Walton, 1997:59). Right: Villa de Madame de Mandrot, Le Pradet by Le Corbusier and Jeanneret (1929) (St. John Wilson, 2007:161).

'Type' is derived from the Greek *typos* meaning variously 'model' or 'mould'. Type, as a system of classification, originated in subjects such as entomology and ornithology (Porter, 2004:211), and gained currency during the Enlightenment as a scientific method for categorization. Typology in archeological terms refers to the classification of types according to common characteristics. In architecture the term refers to formal similarities such as organization and geometry.

The most direct and lucid architectural description of type is that by Quatremere de Quincy in his *Encyclopédie Méthodique* published in 1825. Here he defines 'model' as an exemplar, something to be directly copied, while 'type' is seen as adaptable, a process-driven interpretation and development⁶². The typological approach thus reinforces aspects of tradition to foster historical linkage. As Goode notes (1992:2), Quatremere de Quincy's intention was the

... recovery of a culturally authentic language of built form and space or access to its memory. This is accomplished through recourse to the characteristic forms with which such authenticity has been associated.

A typological approach should also have a recognizable lineage. Theorists such as Vidler refer to the idea of 'type' as an antecedent:

Everything must have an antecedent ... Also we see that all things ... have conserved

— ⁶¹ Chapter 10 will describe the Cape vernacular and mediated Modern Movement typology in more detail.

— ⁶² See Chapter 10 for a similar reference to the interpretation of the vernacular.

... this elementary principle, which is like a kind of nucleus about which we are collected, and to which have been co-ordinated over time, the developments and variations of form to which it is susceptible (Noble, 1997:1-2).

2.6.1. Historical typologies

There are iconic typological antecedents to be found in the history of architecture. In 1753 Laugier referred to the primitive hut (see Fig. 2.8) as a natural (and tectonic) precedent, while prior to this, Vitruvian treatises on architecture highlighted formal and functional typological possibilities. Palladio's four books on architecture *Quattro Libre* followed a practical approach through the analysis of examples and extraction of principles. Frampton (1995:4) points out that Gottfried Semper, in his 1851 lecture, departed from the Vitruvian triad of architectural influences to postulate architecture as defined by four elements. This challenged Laugier's neoclassic stance as it was based on a real Caribbean hut that he visited at the London exhibition of 1851 (see Fig. 2.8). Semper's analysis is more vernacular than naturalistic:

Moreover, one comes to the view that nature in her multiplicity is ever simple and sparse in basic ideas, as she constantly renews the same basic forms, graduating formation and modifying creatures a thousand-fold within the limits of being, by shortening some parts and lengthening others. Likewise, I say that architecture also has certain normal forms at its basis, that are governed by an original idea, by which a few forms reappear in endless variation, conditioned by special purposes or by local determining circumstances (Mallgrave et al, 1983: 24).

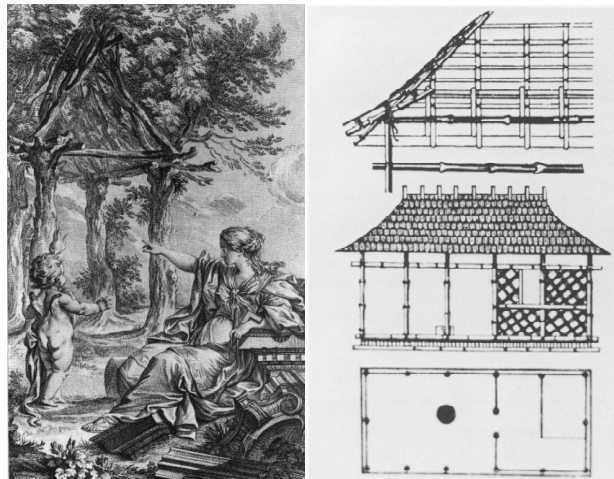


Figure 2.8. **Left:** The primitive hut. Frontispiece from the second edition of Abbé Laugier's *Essai sur l'architecture*, engraved by Ch. Eisen, 1755 (Frampton, 1995:31). **Right:** The Caribbean hut displayed at the Great Exhibition portraying architecture's four industrial motives: ceramic hearth set on raised platform, bamboo posts and roof purlins and woven mat walls (Mallgrave et al, 1983:27).

Later, the neoclassical work of Boullée, Durand (the *Précis*) (see Fig. 2.9) and Leroy formalized typological notions in a graphic manner through a generative process. Noble (1997:1) has

suggested that the typological thread was lost during the Modern Movement but others such as Vidler contest this idea, postulating three historical typologies:

From the middle of the eighteenth century, two distinct typologies have informed the production of architecture. The first developed out of the rationalist philosophy of the Enlightenment, and initially formulated by the Abbé Laugier, proposed that a natural basis for design was to be found in the primitive hut. The second, growing out of the need to confront the question of mass production at the end of the nineteenth century, and most clearly stated by Le Corbusier, proposed that the model of architectural design should be founded in the production process itself ... [W]e might characterise the fundamental attribute of a third typology as an espousal not of an abstract nature, nor of a technological utopia, but rather of the traditional city as the locus of its concern (Vidler, 1997:260).

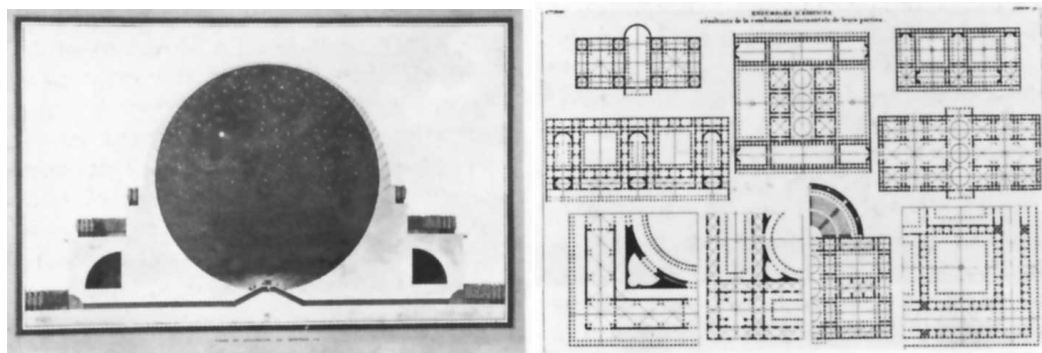


Figure 2.9. Left: Boullée's project for a cenotaph for Isaac Newton c. 1785. Right: Durand's plan permutations (both Frampton, 1992b:15).

It can be argued that three aspects influenced the development of Modern Movement typologies. Firstly, Laugier's primitive hut as a tectonic influence evidenced in Le Corbusier's Dom-ino principle, but defined earlier by architects such as Soufflot, Labrouste and Perret who built in steel and reinforced concrete. Secondly, Semper's four elements as vernacular influences but related to the Modern Movement search for a new architecture that prevented a stagnation of tradition. Vernacular architecture, it was assumed during this time, was as close to first principles as possible, representing an architecture of authenticity.

An argument can be made that Le Corbusier owed this interest⁶³ to Rousseau's ideas on the natural life: the more basic and paradigmatic, ancient or vernacular a solution is, the closer it gets to being "natural" and "original". In this sense, one could talk of the vernacular as a reserve of "original" architectural solutions (Passanti, 1997:439).

The third influence on typological development was the production process and the search for form from function. Leupen *et al* (1997:137) note that this typological approach was used in two ways: firstly, as a way of classifying building function (for example Nikolaus Pevsner's *A History of Building Types*) and secondly, as a model where type was seen as the development of a set of

— ⁶³ An interest in the vernacular.

standards rather than the outcome of historical development.

Venturi (1988:16) notes that Modern Movement architects revered the primitive at the expense of the diverse and the sophisticated, and this critique (amongst others) resulted, more often than not, in a scenographic Post-Modern typological approach. Ironically, during the same period writers such as Oliver and Rudofsky returned to the vernacular for inspiration, this time in a less scientific and more haptic manner.

2.6.2. Typological sources

This section will highlight typological sources in history that are relevant to Fagan. Chapter 10 will explain how these have been adapted and manipulated in his domestic oeuvre. Fagan's architecture is not structured by a simplistic use of typologies, but by a mediation between the principles and values that these typologies represent. The first typological similarity is *generative* (Lewcock, 2006:200 and Leupen, 1997:132) in nature as it provides new solutions that build on history (with an emphasis on the vernacular in Fagan's case). They are also generative in the sense that they are starting points for a new architectural language. The second typological similarity is *productive* through its derivation from functional and scientific processes, developed as a set of standards and not as the result of a historical development. Leupen *et al* (1997:137) note that standard types formed prototypes for new solutions.

2.6.2.1. Generative typologies

Gottfried Semper's *The Four Elements of Architecture: A Contribution to the Comparative Study of Architecture* (written in 1851) was one of the most important contributions to the renewal of architecture at the time, as he wished to revitalize architecture through a critical understanding of theory and design (Semper, 1989:3). Through observation of the Caribbean hut at the London Exhibition of 1851 he proposed an understanding of the 'primitive' circumstances of human settlement as a guide towards the formation of a new architecture. Semper (Curtis, 1996:29) argued that an appropriate way to develop new architectural form was by relying on genetic recombinations where natural adaptation was crossbred with historical progress. Four independent elements were described (Semper, 1989:102 and Semper & Mallgrave, 1986:33). The most important was the hearth which was defined by three 'defending' constituents, namely the roof, the wall (an enclosure created by the craft of the matmaker) and the substructure or the mound. Semper also suggested that the ways in which the four elements were combined depended on socio-cultural and natural influences. A further assertion is that the wall as enclosure had its origins in mat and

weave making⁶⁴. Parallels can be drawn with indigenous South African architecture, where climatic and material differences resulted in delicately woven reed and branch structures and similar clay-covered examples that were developed later (see Fig. 2.10).



Figure 2.10. Progression of framed and reed structures. **Left:** A circular *matjieshuis*, Ou Tuin, Kamiesberg (Walton, 1997:18). **Middle:** Rectangular reed-walled cottage, Oudekraal Fontein (Walton, 1997:30). **Right:** L-plan reed-walled cottage, Oudekraal Fontein (Walton, 1997:31).

Semper (1989:103) described the fireplace as the most important generative element as it provided warmth, energy and a place for the formation of alliances, while acting as a starting point for the development of religion through customs. He further postulated that man's technical skills developed around these four elements – ceramics and later metalwork from the hearth, water and masonry works from the mound, and carpentry from the roof. Rashmere⁶⁵ (1965: 11) describes further cultural associations of the generative tectonic typology:

The wall that encircles the family is an echo of the perimeter wall arranged for defence; but more significantly, it draws the family together round a common, central focus, the hearth. This is their common source of comfort and the form of the roof reflects and strengthens this focus. Each element contributes to the sense of oneness within. The wall, the roof, the hearth, are each individual forms of different origin and function. Together they are a complete statement of spatial unity which lends emphasis to the togetherness of family.

Lewcock (2006:203-212) expands on the influence of the vernacular through his classification of a range of generative typological concepts, four of which are pertinent to the study on Fagan (see Fig. 2.11).

The cave exemplifies man's first non-nomadic shelter. These types of enclosures consisted not only of natural hollows in mountains but also of vertical and horizontal burrows in flat plains. The importance of this typology is a connectedness with the earth and a sense of being protected while surrounded by rock on all sides. The second and related typology is the hearth. Although Semper postulated that the hearth connected with three other architectural elements, the fireplace can survive as a typology on its own through an understanding of its functional and symbolic roles. The third typology is the covered courtyard, a development of the cave typology, as it was often found in

– ⁶⁴ Allied to this is the use of a curtain to separate spaces visually.

– ⁶⁵ See Appendix J.

areas of rocky outcrops. The Etruscan house, as an example, eventually formed the model for the early Roman atrium house. Here an enclosed space is surrounded by buildings on all four sides. The fourth generative typology is the open courtyard house mostly seen in hot and dry regions. Its development from the original Etruscan model is described by Lewcock (2006:210) as an opening up of the roof ridge initially to allow smoke to escape. Eventually the roof was completely removed due to the replacement of the fireplace with an internal pool or impluvium, providing an open connection to the sky. The courtyard typology is formed by a group of surrounding buildings or by a combination of buildings and enclosing walls.

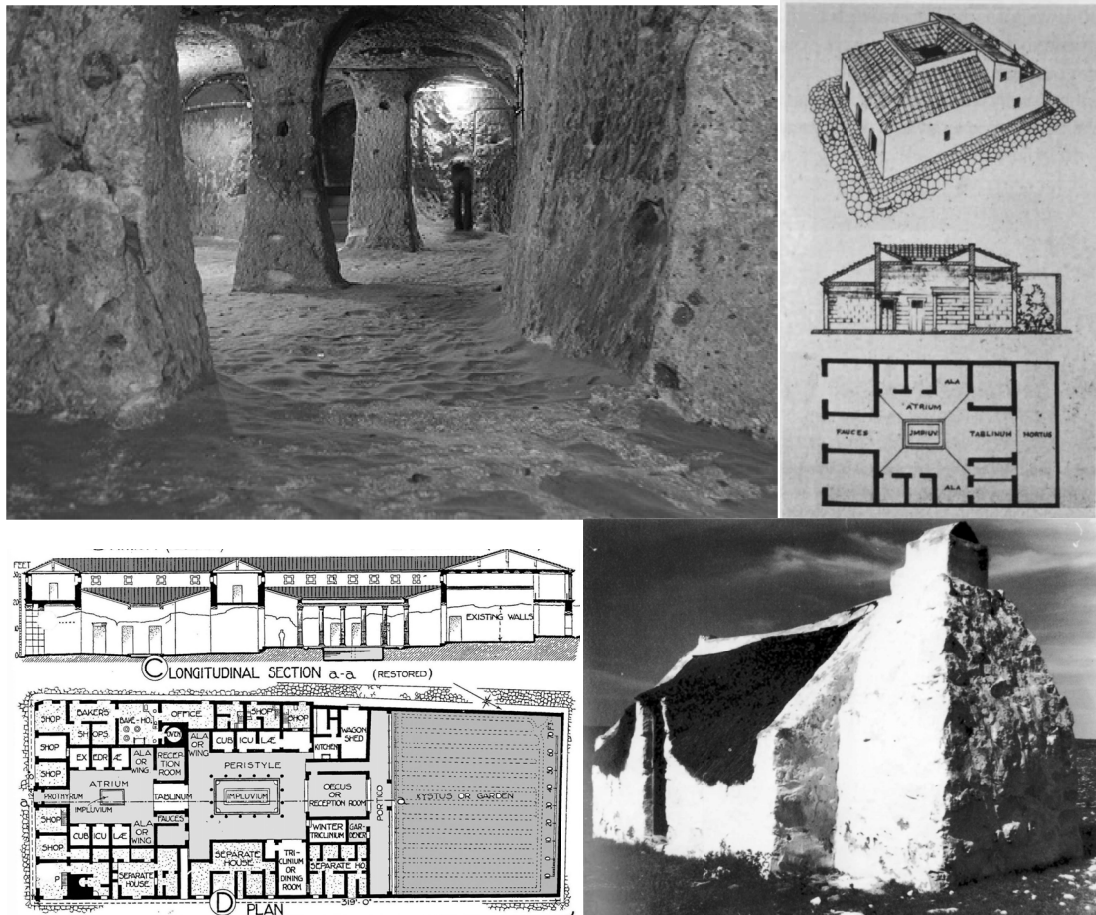


Figure 2.11. Top left: Cave: Derinkuyu underground city in Turkey dating from the 8th to 7th century B.C. (<http://www.istanbuldiary.com/images/turkey/tours/cappadocia/Derinkuyu.jpg> [Accessed 1/05/2012]). Top Right: Covered courtyard. Pompeii, Italy. Early Roman house c.250 B.C. (Lewcock, 2006:208). Bottom left: Open courtyard. House of the Vetti in Pompeii with impluvium (Fletcher, 1946:199). Bottom right: Hearth. A shepherd's one-roomed cottage. Bottekloof, near Stilbaai (Walton, 1997:67).

2.6.2.2. Productive typologies

The Modern Movement search for a new architecture was led by a dominant voice, that of Le Corbusier. At the heart of his and other Modern Movement architects' theories were ideas of

efficiency, economy and health. These ideas, amongst others, led to the development of his five points for a new architecture. This influence loomed large in Fagan's University of Pretoria education⁶⁶ but, as Chapter 4 will show, Fagan responded to an already mediated Modern Movement influence. Despite Le Corbusier's

... rejection of facile revivalism, he felt that the modern architect should reinvigorate archetypes within tradition. In his own creations he emulated the appropriateness and harmony that he saw in nature. Le Corbusier tried to reconcile conventions that he thought right for the modern condition with 'constants' that he thought basic to the art of architecture (Curtis, 1987:13).

2.6.2.2.1. Constants⁶⁷

Three constants can be identified in Le Corbusier's work. First is his exploration of primary form, as can be seen in his illustration from *L'Esprit Nouveau* (see Fig. 2.12), which suggests that simple forms release constant primary sensations (of association) to which each individual responds, depending on their culture or secondary sensations (Jencks, 1985:145). But Frampton, (1996:152) argues that this approach also satisfied functional needs. Curtis (1996:163) suggests that Le Corbusier's penchant for pure form had originated from an understanding of nature through his art teacher L'Eplattenier, but was probably also influenced by the typological teachings of Ledoux and the necessity of looking to the past for general lessons, just as Fagan has done with the Cape vernacular. Although Le Corbusier appreciated the value of historical precedent in his search for primary form he also revered the simple harmony of grain silos, factories, cars and ships (Curtis, 1996:169). But it was the relationship of function to form that drove his investigative search for an appropriate modern form.

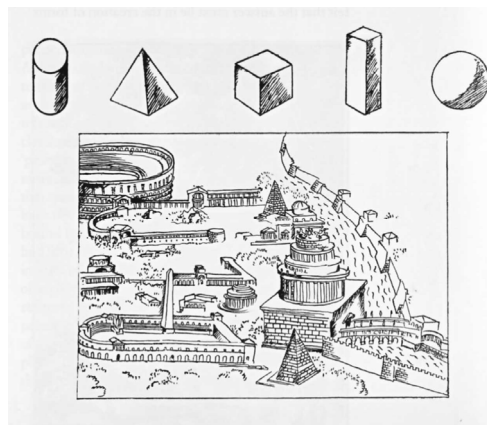


Figure 2.12. Le Corbusier's sketch of primary forms alongside a view of ancient Rome (Curtis, 1996:28).

— ⁶⁶ Chapter 4 will outline the influence of the master on the school and on Fagan himself.

— ⁶⁷ After Curtis (1987:13).

The second constant was the continuous development of type through a mediation between function and economics. Le Corbusier's famous photo collage of the temple of Paestum and the Parthenon and the Humber and Delage motor cars highlighted (see Fig. 2.13), as Curtis notes (1996:169), the importance of standards in architecture. Le Corbusier's hope was that the type forms of wheels and lamps and their relationships within a system could be so refined through an understanding of their requirements that they would reach the same perfection as that of the classical examples shown. This led to the development of housing types and the introduction of the Dom-ino system that would dominate his architectural output for years thereafter.

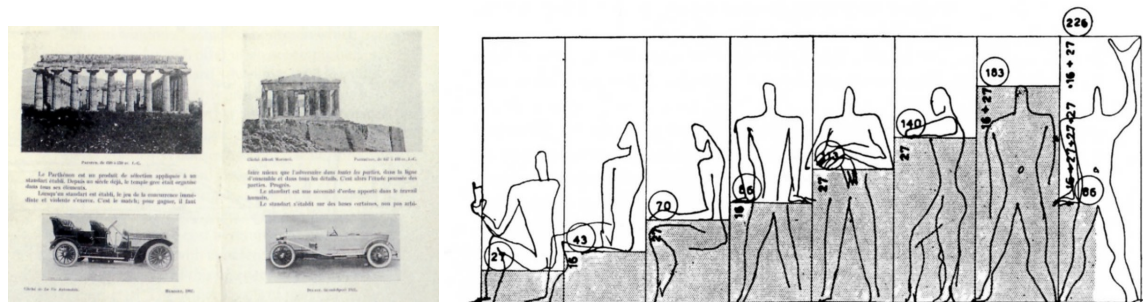


Figure 2.13. Left: Greek temples and cars from *Vers Une architecture*, 1923 (Curtis 1996:169). Right: Le Corbusier's Modulor Man (1946) (Frampton, 2001:162).

The third constant was the use of proportion. Le Corbusier developed his own system called the Modulor mainly based on the golden section (see Fig. 2.13), the Fibonacci series and human dimensions. Just as he had attempted to distill the underlying principles of traditional and even classical architecture, so he tried with his modular system to extol the virtues of natural systems so that in his search for perfection they could be applied to buildings and other objects.

2.6.2.2.2. The conventions⁶⁸

Le Corbusier's generation of the five-point plan for a new architecture developed from his initial work on the Dom-ino system (see Fig. 2.14). This structural system was developed to foster standardization in the building industry but also, as the name infers, a repetition in housing typology (Frampton, 1992:152). The system allowed for the possibilities of a free plan, strip windows, roof garden, pilotis and a free facade. But this patent pursuit of standardization provided a platform for Le Corbusier's more latent search for a set of generic architectural conventions, formulated to deal with the problems of poor late 18th century housing. In his view these required that architecture be efficient, economical (sparing in the use of resources) and provide healthy environments.

— ⁶⁸ After Curtis (1987:13).

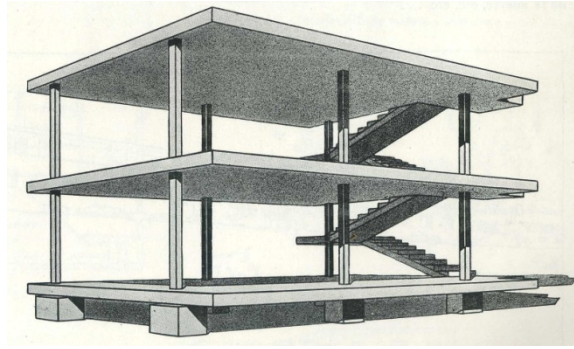


Figure 2.14. The Piloti system (Le Corbusier & Jeanneret, 1943:23).

Le Corbusier argued that architecture should be efficient in terms of organization, planning and use of materials. The development of the free plan created possibilities for multiple uses of space with the economy of a number of smaller spaces collapsed into one. Spaces designed around specific activities could be made as small as necessary. Similarly, architecture had an economic imperative, delivering good value in terms of resources used. Lastly, architecture needed to provide healthy environments through the provision of good solar access and adequate natural lighting for various tasks, while being well ventilated.

Chapter 10 will highlight how Fagan has mediated these influences to create his own unique typological approach.

2.7. Summary

A literature survey of international and local architects, whose approach bears similarities to Fagan's, highlights the importance of practical skills, technological inventiveness, pragmatic design approaches, an appreciation of local vernaculars, and a Modern Movement architectural education.

It was stated that an investigative approach would be undertaken through case studies and written work. This approach would build on the descriptive texts on the architect's work in a critical manner, through mediation between descriptive and normative approaches. In a similar way an attempt would be made to complete the study through a synergetic analysis that combines 'laws and instances' and 'cases and interpretations' research strategies.

An investigative strategy of heterotopia was proposed which suggests that a mediation occurs between dichotomous architectural influences such as Le Corbusier's work and the inherited Cape vernacular. Fagan sits at the centre of this mediatory process. His tools are his influences, design talent and imagination. The resultant attenuative solutions are not quiet outcomes but shift on an imaginary scale that links the two polarities.

Fagan's work demonstrates typological tendencies, and a summary of historical and productive

typological approaches has identified a close alignment with vernacular and Modern Movement influences.

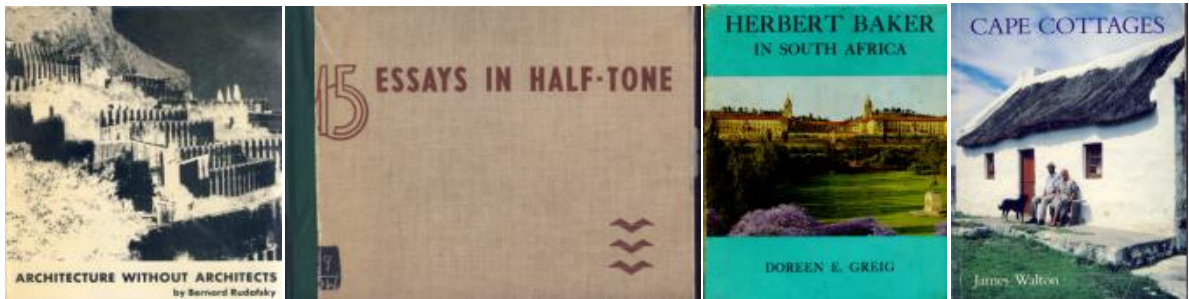
SECTION B

CONTEXTUALIZATION

This section positions Fagan's domestic architecture in its international and local context

Chapter 3

VERNACULAR VARIATIONS



Architecture without Architects cover (Rudofsky, 1964). *Essays in half-tone* cover (Cole Bowen, 1957). *Herbert Baker in South Africa* cover (Greig, 1970). *Cape Cottages* cover (Walton, 1995).

This chapter frames Fagan's domestic architecture as mediation between Tradition and Modernity:

Terminology will be investigated and explained. Terms such as 'vernacular' and 'neo-vernacular' will be elucidated and new terms such as 'inherited' and 'fourth vernacular' postulated.

Design approaches to the vernacular will be explained.

Fagan's work will be described in the context of a series of Cape vernaculars, all as mediations between local and international influences.

3.1. Introduction

No poet, no artist of any art, has his complete meaning alone. His significance, his appreciation is the appreciation of his relation to the dead poets and artists⁶⁹. You cannot value him alone; you must set him, for contrast and comparison, among the dead. I mean this as a principle of aesthetic, not merely historical, criticism (Eliot, 1982:37).

To understand Fagan's architectural influences we need to trace their origins. Fagan's context needs to be clearly described in terms of his relationship to architectures and histories of the past.

This chapter will position Fagan's domestic architecture within a continuum of place-specific or regional architectures. The determinants of tradition and modernity which suffuse his work will be discussed so as to elicit an understanding of the approaches to architecture that he has adopted and adapted over time. To contextualise and locate the influences on his work it is necessary to identify remnants of influences on his domestic architecture and then investigate their lineage. Two main aspects are evident: firstly, the response to place as exemplified in his reverence for the local (albeit inherited) vernacular through the years of conservation work that he has undertaken, particularly in the Cape, and secondly, the abiding influence of the functionalist and pragmatic late modern architectural education that he received at the University of Pretoria. "[h]is houses do not take a polarised position between modernity and tradition, but creatively combine both in a circumspect way" (Pretorius and Raman, 2006:53).

The common threads of tradition and modernity that permeate Fagan's domestic architecture are at opposing ends of the scale of possible architectural influence. They contrast contextual necessities with universal spatial ideals. They merge functionalist and rationalist requirements with recognisable but manipulated vernacular form, while using the principles of traditional technologies to foster new tectonic solutions. They also mediate functional concerns with experiential qualities. In *Architectural Regionalism: Collected Writings on Place, Identity, Modernity*, Canizaro (2007:22) notes that the tension between tradition and modernity is as much about the relationship between people and place as it is about the needs of imitation and the desire for invention. Fagan manipulates these oppositions to fuel a new architectural direction, refusing to be limited by either of the informants. He creates a heterotrophic architecture that mediates between the extremes of the polarities, each architectural solution creating new tensional syntheses.

To understand Fagan's responses it is necessary to position his work within the continuum of the way both international and local vernacular architecture is defined. This chapter deals with

– ⁶⁹ Include architects here as well.

Fagan's relationship to his local vernacular and later chapters assess his relationship to the Modern Movement and regionalist mediations both internationally and locally.

3.2. The vernacular – definitions and clarifications

3.2.1. Introduction

The study of vernacular, or spontaneous architecture has recently become popular, especially since the publication of Bernard Rudofsky's "Architecture without Architects" during the early sixties. The reasons for this resurgence of interest in this type of architecture may be of a varied and complex nature but it would be safe to assume that the human quality of the buildings, with direct relationship between occupant, structure and decoration and simplicity of construction and functional organization, has a powerful appeal in an environment that is marked by an increasing impersonal and inhuman dimension and by bewildering technological complexity (Theron⁷⁰, 1973:3).

When nomadic peoples first settled, they built spontaneously and intuitively in the landscape. The formation of shelter was guided, in the main, by prevailing environmental factors such as climate and available materials. This 'primitive' or indigenous architecture displayed a conscious response to the creation of internal realms while being initially influenced unconsciously by limited social and cultural practices. As Frampton (1983a:148) notes, this type of architecture was a synergy of climate, culture, myth and craft.

These responses were constantly reworked, as Rudofsky (1977:13) suggests, through a redistribution of hard-won knowledge. The tried and tested solutions were replicated to form a *vernacular* architecture that was particular to a region. As these solutions were handed down from generation to generation they established a building *tradition* which shifted the pendulum of influence from unconscious responses to climate and materials to a more self-conscious expression of identity through social, cultural and religious symbols. The *vernaculars* established historical continuity, providing the inhabitants with a sense of belonging.

And since they were of an imitative and teachable nature, they would daily point out to each other the results of their building, boasting of the novelties in it; and thus, with their natural gifts sharpened by emulation, their standards improved daily (Vitruvius, c. 46B.C.1998:39).

Initially, all of these responses were internally generated, but as trade and more aggressive cross-cultural engagement took place, external influences began to play a larger role; the more powerful the external influence, the more serious the effect on the local tradition. But in *Shelter*

– ⁷⁰ See Appendix J.

and Society Oliver (1969:11) notes that

... the assumption that vernacular architecture implies that which is indigenous to a country and not borrowed, or learned from, is still open to argument.

The advent of colonialism impacted both negatively and positively on vernacular architectures. Where vernacular architectures were ignored or did not exist, *inherited vernaculars* resulted. In some cases these vernaculars subsumed local architectures (as in South Africa), resulting in the demise of indigenous cultural expression. The advent of the Modern Movement has probably had the most impact on local architectural traditions, in the main being more deleterious than beneficial. However, for the purposes of this study the latter influence is an important one to investigate in the domestic work of Fagan, as his architectural training was largely a Modernist one. This influence will be returned to later in this chapter and in more detail in Chapter 4.

3.2.2. Definitions

Vernacular architectures are an allegory for the historical experience and cultural identity of their creators. A fully self-determined, self-named people own the right to build for themselves according to the relationships and patterns of their own particular culture, history, and environment. Once this right is lost, they are forced into dependence upon industrial materials and an architecture that reflects the cultureless anonymity of capitalist technology (Rodriguez & Pettus, 1990:2).

The term vernacular finds its origins in how it pertains to the use of forms of language and, as Oliver⁷¹ (1969:10) notes, is extended in meaning from its use in linguistics as a metaphor to the field of architecture. He also indicates (1969:11) that George Gilbert Scott referred to the term 'vernacular domestic architecture' as early as the mid nineteenth century but that the origin of the term is not clear. Two possibilities exist: the first is the French term *verna* which refers to a home-born slave and the second *vernaculus*, from the Latin, meaning 'native'. Although both terms are etymologically linked to ideas of language and have been uncomfortably adopted into architectural discourse, both have validity in the work of Fagan as they reflect a condition of domesticity, respond to local conditions and imply a link to nature⁷².

– ⁷¹ Fagan has three books by Oliver in his library at Die Es.'

– ⁷² It is interesting to note that the domestic architecture of Fagan draws from the vernacular, while his commercial and institutional interventions rely more heavily on reinterpretations of modern architecture.

3.2.3. Approaches to the vernacular

In a very broad classification we observe two approaches to vernacularism: first is the conservative attitude and second, the interpretative attitude. While both kinds of vernacularism have the ideals of bringing a new and contemporary existence to vernacular forms and spatial arrangements, they differ in the way they treat technology and community (Ozkan, 1985; 2007:104).

Rapoport (2006:182) posits a similar distinction, closely related to the act of doing (a traditive approach), when he suggests that attitudes towards using vernacular architecture vary from learning by copying and learning by analysis. Curtis (1996:619) is more prescriptive:

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 transformation to meet different conditions and fit new intentions.

'Learning by copying' tends towards a scenographic approach where formal qualities are privileged, while 'learning by analysis' extracts lessons and principles through environmental behaviour studies. Neither of Ozkan (1985; 2007:104) and Rapoport's (2006:182) distinct approaches to the use of the vernacular are satisfactory processes in their own right. The limitations of a formal expression freeze architecture and do not give it adequate currency, while a process of interpretation or analysis can abstract the architecture to such an extent that historic validity and meaning is lost. What is required is an attenuative approach that understands new circumstances and requirements, interprets the relevance of either polar approach and then effectively mediates between the two conditions.

Although the term 'vernacular' can be seen as static and formally directed, as applied to architecture it is not merely a monotonous response to local conditions. Rudofsky (1977:13) refers to this constancy as a possible weakness of the vernacular approach, but Rapoport (1969:4) has identified the vernacular process as

... one of models and adjustments or variations, and there is more individual variability and differentiation than in primitive buildings; it is the individual specimens that are modified and not the type. When a tradesman builds a farmhouse for a peasant, they both know the type in question, the form or model, and even the materials. What remains to be determined are the specifics – family requirements, size and relation to micro climate.

Fagan (1982a:2) agrees when describing pre-industrial building:

When great-grandfather wanted a house and hired a tradesman to assist with the building, they would walk to the site, look at the trees and the slope of the ground, at the view, also that the new house would not obstruct the view from Oom

Gysbert's house behind. They would then take a number of paces, take a stick and mark the plan of the new house out on the earth. Note that there was no need for great-grandfather to describe the type or model – both he and the tradesman knew the model.

Both descriptions illustrate that the vernacular as product is clearly understood in formal, material and contextual terms but that its interpretation is flexible. As requirements differ, so the model can be adapted. Vellinga (2006:88) indicates that

... the vernacular, in other words, needs to be de-reified. Rather than treating it as a category that consists of buildings that, as static objects, can be categorized in neat types and periods and that, concomitantly, may be more or less real or authentic depending on which type or period they belong to, the dynamic and processual nature of buildings, and the traditions they form part of, should be the starting point of analysis (Vellinga, 2006:81).

This suggests an interpretation of the vernacular that prevents it from being an outdated and irrelevant form of architecture and rather sees it as reflecting a regenerative intention. As Biermann points out:

This is of importance in assessing the contribution the past can make to our present day vernacular, as Mr. Revel Fox stressed in discussing the continuity of the tradition. The Cape architectural tradition was far richer and more complex than the surviving buildings (most houses) imply (Biermann, 1960:27).

It also shifts the emphasis from the term 'vernacular', as subject, to the term 'tradition' which implies, in its Latin etymology⁷³, a process of handing down experiences and practices. 'Tradition' implies action and can be defined as a process of exchange and ongoing development. It is a more apt term to describe the dynamic nature of vernacular architectural responses, making its study relevant and valid.

Traditions can be seen as creative processes through which people, as active agents, interpret past knowledge and experiences to face the challenges and demands of the present (Asquith & Vellinga, 2006:7).

Canizaro (2007:27) quotes Giddens in his description of tradition.

[It is a] means of handling time and space, which inserts any particular activity or experience within the continuity of past, present and future.

Vellinga (2007:89) further elaborates on the processual nature of 'tradition' as a creative process through which knowledge is adapted and interpreted against the requirements of the present. Bronner (2006:25) concurs:

– ⁷³ The Latin word *trado* means 'handing down'.

Tradition as an idea invites commentary and interpretation, and negotiation of allowable innovation, which might later become part of the dynamic of tradition.

Fagan also agrees with these approaches when he notes that

... a really thorough understanding of one's own vernacular architecture [is] an essential and also the soundest basis, for continuing creation (Fagan, 1985:2).

Once the act of tradition has run its course, a revised vernacular arises and the process continues, creating an architecture that is both of its time and reflective of time itself. Fagan's 1989 lecture on the vernacular is in fact entitled *Die toekomst van ons verlede* ["The future of our past"]. Authors such as Porter (2004:203) and Jencks (1977:96) have defined the traditive process that took place after the years of the Second World War (1939-1945) as neo-vernacular, suggesting that it is a vernacular that is subjected to an outside architectural style or design theory. This can be defined as a less spontaneous and more cerebral approach to the vernacular.

It is held that the use of models by craftsmen became less necessary as the development of scientific techniques enabled man to discover the general laws underlying the technical solutions of the pre-industrial age (Colquhoun, 1969:71).

Ozkan (1985; 2007:105) on the other hand, indicates that the term neo-vernacularism arises from an interpretative and not replicative form of vernacularism and "has emerged as an approach to bringing a new life to vernacular heritage for new and contemporary functions".

In any event, the traditive process is not only a resolution of the conflicts of constancy and change inherent in vernacular processes, but a strategy to allow the importance of the historical precedent to be retained and the necessities of modern life to be reflected. Rudofsky (1977:13) notes that a rigid definition of the vernacular "is so bound up with the essential indigenous character of the forms that any hints of imported techniques of building may invalidate them".

The following aspects can be said to define architecture as a vernacular response: firstly, a consistency of approach which results in recognisable form, use of technology and response to climate; secondly, a repetition of approach (which establishes a tradition) and thirdly, a development of the approach through a shift in influence, due to external or internal forces. The latter aspect could be a creative reaction on the part of the receiver (designer or builder), or an external influence, such as the arrival of a new group of people with different cultural practices, new functional requirements or changes in technology. As Fisher points out (1998:123), a change in any of these circumstances will foster a variation in architectural response.

If we understand the etymology of the meaning of the term 'tradition' as being a process of 'handing down', then we need to, firstly, identify the relevance and content of that which is being

handed down; secondly, how this transfer occurs and thirdly, how the information is received and interpreted. The next sections will investigate the vernacular in South Africa, particularly in the Cape region, what approaches have been taken, and how Fagan has understood and interpreted the process of 'handing down'.

3.2.4. South African inherited vernaculars

Picture a Cape Dutch farmhouse [see Fig. 3.1]. Thatch and whitewash. Oak trees screening the open *stoep* [terrace]. Then wide, green doors, windows delightfully proportioned, and great tiles covering the floors. There is nothing inconsequent about these elements, these materials. They arose from a divine instinct for what is good, from a sure knowledge of the fundamentals of fine building. Architects today build houses in the "Dutch style". They must be Dutch, for they possess gables, they have stable doors. But thatch is not a practicable material. They use corrugated iron. They forget to plant the oaks. Granolithic is cheaper than tiles, asbestos replaces yellow wood and teak for ceilings, and so the cutting down goes on. The resultant house is a poor shallow thing compared with its predecessors. It does not resemble the latter even in spirit, certainly not in the letter. No, the lesson we learn from the old houses at the Cape is not so obvious. There is something more significant in studying the subtleties of a gable, than one would at first suppose. If we are not to abuse the privilege of study, we must not regard the gable as something 'to be worked into a design' at the earliest opportunity. Our approach should be from quite a different angle. There are certain qualities in the form of the gable, certain effects of light and shade, of texture and of modelling, which please us. By close examination and the drawing out of these forms we can see exactly what it is that satisfies us aesthetically (Martienssen, 1928:1).



Figure 3.1. Boschendal, Stellenbosch, Cape Town. One of the oldest Cape farmhouses, first settled in 1685 and restored by the Fagans in 1973 (Author, 2007).

South African architecture has been characterised by colonial influences which have, to a large extent, been tempered by climatic, constructional and cultural circumstances. The original indigenous settlements that created a zero vernacular (Fisher, 2003:123) were subsumed in the successive waves of colonialism that swept across the country for the next 300 years, resulting in Dutch⁷⁴ and English adaptations and later Neoclassical and Arts and Crafts manipulations.

The architect and historian Doreen Greig⁷⁵ (1971:17) (1943-) identifies three distinct vernacular periods in the development of architecture in South Africa, of which the first was the Dutch influence, later referred to as the Cape Dutch vernacular. Greig (1971:18) suggests that it synergised European, colonial and Eastern traditions with the local context. The second vernacular was a Georgian influence brought to the country by the 1820 Settlers which extended the first vernacular through the importation of classical features from pattern books. The inherited architecture was adapted by craftsmen through the use of local materials. The third, unconnected, vernacular occurred in Natal, where the use of red bricks influenced and adapted the British Victorian style.

In contrast to Greig's definition of a third vernacular, Fisher (1998:123) suggests that a third vernacular arose in Pretoria during the 1930s and 1940s. Here a short-lived burst of classical Modern Movement architecture shifted towards a more place-specific architecture, and after the Brazil Builds Exposition and the publication of a related book, the city of Pretoria underwent a regional shift in its architecture. This reflected

... a particular response to nature and landscape through the economical use of naturally available and industrially produced materials with an empirical response to climate, all of which tempered the emergent tenets of the Modern (Fisher, 1998:123).

A qualifying term is needed to understand the architecture that resulted from a colonialist occupation. Influences were brought by craftsmen to a new country where their constructional and formal knowledge was manipulated to suit the local availability of materials and climatic constraints. This can be seen as an *inherited vernacular* finding new meaning in a new context, as it reacted in dynamic ways and established ways of building that would influence architecture for many decades thereafter. Thus new vernaculars to emulate and interpret were effectively established.

If one accepts the definition of a vernacular as the result of a traditive process, then a formal lineage needs to be visible, with a consistency of context as a necessary prerequisite. Greig (1971:17) speaks of "belonging to a certain region as a requirement for a vernacular to exist".

– ⁷⁴ Fagan (1977b:5) notes that the Dutch were also influenced by the Portuguese.

– ⁷⁵ See Appendix J.

3.2.5. A redefinition of inherited vernaculars in South Africa

It can be argued that a more consistent vernacular lineage is to be found in the Cape region of South Africa, more so than that which existed in any other province in South Africa. It is possible then to contest and redefine Greig's and Fisher's classification of a third vernacular in Natal and Pretoria to align with developments in the Cape. Greig's (1971:17-18) classification of a third vernacular in Natal may be chronologically correct but it creates confusion in relation to the definition of her first two vernaculars. She describes these as building on one another in similar contexts. Although Greig's argument for regional consistency in determining a vernacular is relevant to the uniformity of architecture produced in Natal, her numbered classification does not support a lineage in vernacular development. A Natal vernacular would have been a more apt description.

Fisher suggests that the repetitious nature of the particular regionalist style that developed in the Pretoria region turned it into a vernacular. But the lineage of his definition of a third vernacular is not a continuous one and was largely born from an understanding of the climate of the Transvaal and adaptations of the pyramid-roofed houses of the time (Fisher, 1998:124). If one accepts the definition of a vernacular as posited earlier, then there is little supporting lineage to link it to Greig's first two vernacular definitions. Fassler's⁷⁶ (1910-1971) (1957:22) reference to a Transvaal vernacular⁷⁷ suggests a term more suited to the local context and the influence of Brazilian Modernism.

Although Fagan may have been educated in the Transvaal, it was the regionalist Modern Movement leanings of the Pretoria architectural course and not the local vernacular that influenced him. Fagan (2008d) has remarked that the amorphous shapes of Karel Jooste's⁷⁸ (1925-1971) 1950s and 1960s houses were appropriate for the spaces under the Mopani trees, but that the Cape called for singular object buildings. He further notes that

... although privileged to have personally known and learnt from architects like Gordon McIntosh⁷⁹, Hellmut Stauch, and Norman Eaton, rather than identify myself with the latter's Zimbabwe-like vision of an organic African architecture, I sensed my home to be rather in the Cape, mellowed by centuries of European culture, which had produced an architecture of which Eaton himself believed that "the aesthetic pinnacle reached by this Cape Dutch work, in and of its own time and country" would never be exceeded (Fagan, 1983b:3).

The lineage of the vernacular in the Cape region of South Africa displays greater consistency in

– ⁷⁶ See Appendix J.

– ⁷⁷ See the end of Chapter 4.3.5 for supporting definitions.

– ⁷⁸ See Appendix J.

– ⁷⁹ See Appendix J.

terms of architectural form, response to context and tectonic tradition.

[The] basic element of South African colonial architecture is a broad, freestanding, single-story building only one room in depth. The high thatched roof is framed by parapet gables, its dark tone forming a strong contrast to the whitewashed walls (Van der Meulen, 1963:52) (see Fig. 3.2).



Figure 3.2. Top: Vernacular houses in Velorenvlei photographed in June 1972 (Fagan slide archive EM, undated). **Bottom:** Plan, section and axonometric of typical 19th-century vernacular dwelling in Struisbaai, Southern Cape (Japha, 1997:2159).

The Cape initially hosted the inherited vernacular (first vernacular according to Greig) of the Dutch/German rural tradition, which took on a limited influence of the Khoi-Khoi (a zero vernacular according to Fisher), through, for example, the adaptation of the reeded roofs such as those extant at Puntjie in the Cape (Fisher, 1997) (see Fig. 3.3). Fagan agrees that the roots of the Cape vernacular come from a common heritage but denies⁸⁰ any local influence.

Whereas the architecture brought to the Cape by the Dutch and subsequently by the English shared common European roots (it would take a knowledgeable person to distinguish a Cape Dutch town house from a later English Georgian one), neither had much in common with the Khoi reed shelters which the first settlers encountered here (Fagan, 1991a:2).

– ⁸⁰ In an interview on 15 February 2012 Fagan reiterated this viewpoint quite vehemently. Although there may be no formal similarities between the local and inherited vernaculars, Fisher's argument is that local materials and the local inhabitants would have exerted some influence.

The origins of this vernacular are contested as being purely urban Dutch models and are probably more rural in nature and more influenced by a German lineage (Van der Meulen, 1963:51 and Japha, 1997:2150).



Figure 3.3. Houses at Puntjie in the Southern Cape (Fagan archive, undated).

In South African architecture there has been much speculation about the origin of Cape Architecture, with many writers, such as Sir Herbert Baker, Geoffrey Pearse, Hans Fransen, Mary Cook, Tremens Clefios and Jan Ploeger concentrating on tracing the lineage of the front and end gables to buildings in Holland. A notable exception was Jan van der Meulen who took cognisance of the typology of the house plan and other architectural features, as well as social considerations over a much wider geographical area (Prinsloo, 2000:147).

The vernacular architecture that ensued was informed by local materials and the skills of the settlers (Prinsloo, 2000:148). Fired bricks were available from 1654 onwards but their inferior quality required a lime plaster covering which was made from shell deposits discovered on Robben Island. The typology of these first dwellings reflected a simple rectangular building with central doorway (normally in the long side), shuttered windows flanking the front door, and a fireplace recessed at one end of the room (Prinsloo, 2000:148).

Later developments saw these linear buildings extended with access to other rooms from the central "voorhuis" or front room. T, I and U plans followed (see Fig. 3.4), all extensions of the simple linear form.

The climatic conditions of the Cape varied considerably from those of the land of origin of the settlers, a fact which also produced variations in their architecture. A brilliant sunshine all the year round with but little rain except in winter necessitated the employment of large, airy and lofty rooms covered with heavy roofs designed to keep the rooms cool, and shuttered windows which effectively kept out the heat during the day. Also, as a good deal of time was spent in the open air, the ample stoeps shaded by great oaks, and the enclosed courts, often covered with a trellised vine, were indispensable adjuncts to every home (Pearse, 1968:7).

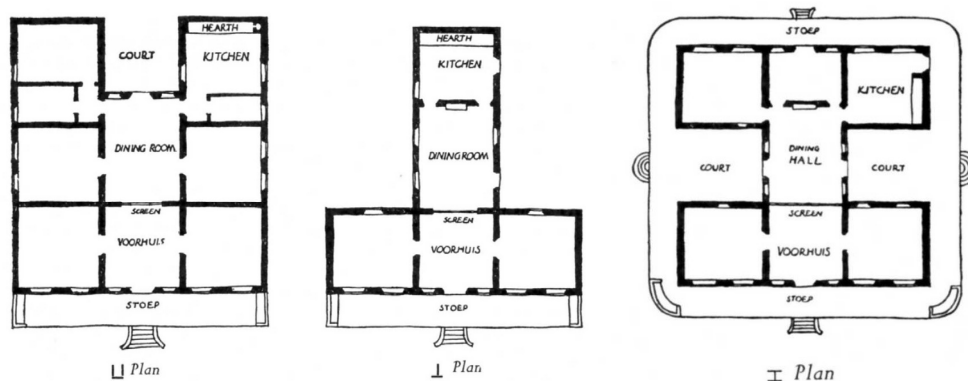


Figure 3.4. U, T and H plan types (De Bosdari, 1971:19).

The second Cape vernacular arose from the Georgian influence that transformed the first vernacular into a new, yet recognizable and climatically suitable formal architecture. Lewcock (1960:28), however, suggests that the British influence was changing the architectural patterns of the Dutch at least 25 years before 1820 while Cape Dutch homesteads were still being built. In any event, the arrival of the British certainly adapted Dutch influences (Anon, 1970:521). The planning and internal and external details of their houses were 'British' in character (see Fig. 3.5), but the block form was typical of the Cape (Japha et al, 1997:2157).

Between 1840 and 1885 British influence and the Cape tradition were combined to produce distinctive hybrid vernacular buildings ... the buildings of the more prosperous – the majority of surviving houses – brought together the block forms and building methods of the Cape with plan forms, building elements and details derived from British immigrant influence, pattern books and the work of British craftsmen. In general, 18th century building types continued to provide the models for these buildings (Japha, 1997:2159).

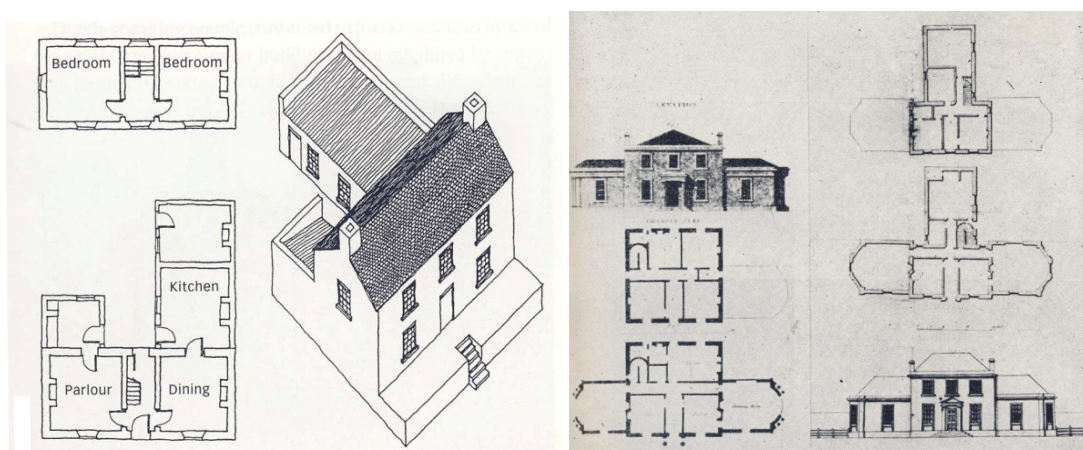


Figure 3.5. Left: Plan and axonometric of typical double-storey slate roofed Eastern Cape settler house showing central passageway (Japha, 1997:2157). Right: The influence of Nicholson's "Practical Builder" published in 1820 (on the left) can be seen in the design of the Dutch Reformed Parsonage in Worcester in 1824 (on the right) (Lewcock, 1960:31).

Derek and Vivienne Japha⁸¹ (1997:2159) further suggest that the 18th century single banked T- and H-plan block buildings were modified to two room deep rectangular plans. Buildings became more vertical and windows were set back in the walls (Gledhill, 1971:2).

British houses at the Cape had halls and passages ... plans with passages had already been introduced before British rule; but they were not common then, and the subsequent popularity of passage plans in the houses of all groups at the Cape was largely the result of British influence (Japha, 1997:2156).

A third Cape vernacular was formed through the Arts and Crafts⁸² influence of Baker, which already had its roots in a British and European vernacular approach.

The history of late Victorian and Edwardian architecture in Britain has been described as 'being of great complexity, with waves of fashion and many cross-currents confusing the sequence of developments'. Through it all flowed the consistent search for this elusive, free 'modern vernacular', emerging as what was aptly named the Free Style. Although the term was meant to be applied to architecture in a new style appropriate to its time, it was also used to describe any building which used a free treatment of an historical style or combination of styles – even a free vernacular style. As Hermann Muthesius, author of *Das Englische Haus* (1904-5) found when he tried to characterize 'the exemplary qualities of the English house', the qualities he admired most were not based on style but arose from the restraint and 'honesty' derived from the most simple vernacular buildings (Keath, 1994:12).

The resulting 'Baker School'⁸³ (often referred to as Cape Dutch revival) further extended the Cape architectural traditions, albeit in a more structured and architecturally designed manner (see Fig. 3.6). Prinsloo (2000:123), Joubert (2009:9) and Greig (1970:58) note that Baker synthesised the Cape vernacular into a classical eclectic approach. Chipkin (2009:56) indicates that

... this had been rediscovered via Arts and Craft awareness of the robust simplicity of the original colonial culture at the Cape – weathered, imperfect, full of genuine foibles amongst the richly creative responses, possessing what Baker recognised as "gracefully curved gables and softly moulded enrichments". Rhodes' famous instructions to his architect, which ended with the words "I like teak and whitewash".

– ⁸¹ See Appendix J.

⁸² "Charles F. A. Voysey summed up the qualities that should emerge from an honest response to the vernacular tradition beautifully: 'Try the effect of a well proportioned room, with whitewashed walls, plain carpets, and simple oak furniture, and nothing in it but necessary articles of use, and one pure ornament in the form of a simple vase of flowers' " (Gebhard, 1989; 2007:195).

– ⁸³ Prof. Geoffrey Pearse, of the Department of Architecture at the University of the Witwatersrand, coined the term to describe those architects that had worked in the office of Baker or the Department of Public Works in the Transvaal and Free State after the Anglo Boer War of 1899-1902.

Greig also indicates that Baker was instrumental in spurring others on to preserve Cape vernacular buildings and that he used these buildings to create a revivalist architecture, while Fagan (1991b:8) notes that:

Baker fully identified himself with ... a truly South African architecture that would combine the best of the English and Cape Dutch traditions, use local materials and be suitable to our harsh climate.



Figure 3.6. **Left:** Entry courtyard to Baker's Westminster near Ladybrand in the Free State (Author, 2008). **Middle:** Groote Schuur restored by Baker for Cecil John Rhodes around 1892 (Picton-Seymour, 1989:40). **Right:** Baker's Rust en Vrede, Muizenberg, Cape Town (Picton-Seymour, 1989:173).

The advent of formalised training in architecture during this period changed the nature of the vernacular influence. Unconscious traditive processes began to give way to a more intellectual approach. Neoclassical tendencies were countered by the Arts and Crafts influence which, as a neo-vernacular⁸⁴, was influenced by eclecticism rather than by an interrogation of the original first Cape vernacular.

Sir Herbert Baker, of course, at the beginning of the century drew attention to the quality of Cape buildings, emphasising particular aspects. This was later to degenerate in lesser hands to the indiscriminate use of the 'Cape Dutch gable' and linenfold detailing, to everything from small suburban houses, barely able to carry the weight of their overpowering gables, to railway stations, post offices and electrical substations (Munnik & Visser, 1965:36).

The degree to which each vernacular has built on that which preceded it, or whether its development in the Cape relied on a process of reinvestigation of the first vernacular, is a matter for debate. Lewcock (1963:IX) suggests that colonial architecture generally reflects a conglomeration of influences so that

... one cannot confidently pronounce a fine building as belonging to either a Cape or a British tradition, but must declare it the product of a new, 'South African' culture.

Of importance is the fact that a consistent vernacular lineage was established with subsequent vernaculars building on and extending preceding influences. The Japhas (1997:2151) explain

– ⁸⁴ This definition suggests that a neo-vernacularism exists at any juncture that reacts against a particular architectural tendency, in this case to Neo-Classicism.

the similarities of the vernaculars:

A thatch cottage with side gables built in the mid 19th century by a mission inhabitant, a poor 1820 settler artisan, an inhabitant of a small Cape country town, or even a Voortrekker, differed little from buildings found in the Cape countryside 150 years earlier ... Plan types, room widths, construction methods and joinery patterns were repeated over a long period with little variation; only the forms of gables changed to reflect contemporary European fashion.

Cape based architects Munnik and Visser⁸⁵ (1965:36) describe the simplicity and honesty of the vernacular:

It is the simplicity of their form, usually a rectangle with a simple pitched roof and clipped eaves, inevitably painted white, which seems to fit so honestly the purpose for which they were built ... What undoubtedly appeals to the modern architect, being endlessly bombarded by gimmicky materials and ever rising costs, is the unpretentiousness and unifying effect of whitewash, and the simplicity and honesty of the structure.

3.2.6. The fourth vernacular

Houses designed by Pius Pahl, Revel Fox and Gawie Fagan during the 1950s and 1960s can be categorized as a fourth Cape vernacular. The architecture built on and extended the formal and technological legacy of the first three vernaculars. A consistency of approach to climate was developed through window wall proportions and technology. Simple white box forms were generated through the reinterpretation of local vernacular form, often with fireplaces as focal elements either externally or internally placed. Consistency in planning was achieved through functionalist organization that revealed efficient use of space, all influenced by Modern Movement tendencies and the attenuated plan of the vernacular long-house. A simple approach to technology emulated that of old and fostered an economy of means, most houses relying on white painted bagged or plastered brickwork with clay tile floors internally and simple pitched roofs. The design approaches were attenuative in that they all displayed a shift in formal influence that recognised principles and formal attributes of the vernacular while contextualizing Modern Movement attitudes to space making, technology and climatic response. This approach fostered a new way of making buildings that layered functional determinism on an established formal tradition. A new and fourth vernacular was born.

The houses of Fox and Pahl, together with those of many young architects sympathetic to their ideas are sufficiently consistent in approach to be recognisable as a Regional Style ... But while these are the physically recognisable elements, they are born of the desire to express some form of historical continuity, to build simply and in an uncomplicated way and to a certain degree, to protest against the

– ⁸⁵ See Appendix J.

current tendency of wilful and meaningless design. In their pure form, with their raw brick or tiled floors, and roughly plastered white-washed walls and untreated pine ceilings, have a stark contrast and strength akin to Brutalism except that in the Mediterranean sunlight and profusion of flaming bougainvillea the 'kitchen-sink' aspect of Brutalism is overwhelmed by charm, for better or perhaps for worse (Munnik & Visser, 1965:36).

3.2.7. Fourth vernacular architects and their approaches

3.2.7.1. Revel Fox

The last houses done at Worcester, and those he was doing in Cape Town, soon came to be known as 'Fox boxes' – they had flat roofs, quite diagrammatic plans, and incorporated timber-louvered screens. They had something of those Californian case study houses (which were to culminate in the Eames house at Santa Monica) and were also reminiscent of the old flat-roofed cottages of the Karoo (Guedes, 1998:34).

Fox's architectural education at the University of Cape Town under Pryce-Lewis, the valuable historical lessons taught and later learnt on the travels to Egypt and Italy during the Second World War (Fox, 1998:26), and his subsequent sojourn with wife and child to Scandinavia paved the way for an ordered, and perhaps Classical or canonical, response to the making of architecture. The Swedish classicist architecture of Ivar Tengboom⁸⁶ (1878-1968) (Giedeon, 1971:623) was influential, as Fox worked with an architect from the foreign buildings operation of the US embassy whose unit was based in the offices of his son, Anders Tengboom (Fox, 1998:13).

On returning to South Africa, Fox quickly established a reputation as an avant-garde architect of outstanding sensitivity and skill in detailing in the small country town of Worcester in the Western Cape. Buildings like his courtyard house for the Wilson family (1954) and the Fox and Ross houses (1955) reflect contemporary Scandinavian concerns that architecture should establish continuity with the buildings around it, without compromising the goals of using appropriate, contemporary materials. This work exerted great influence on a whole generation of young architects (Lewcock, 1998:37).

Fox admitted that he struggled with design in his first few years at university, but the influences of Barrie Biermann as a classmate must have heightened his senses to the opportunities of the Cape vernacular. On his return to the university in 1946 after the war he received a modernist education from lecturers trained at the Architectural Association in London who were

– ⁸⁶ See Appendix J.

themselves influenced by the teachings of the Bauhaus (Fox, 1998:26).

3.2.7.1.1. Approach

Fox mediates replicative and interpretative approaches in the design of his houses, relying on both first and second vernacular influences. Fox's approach to domestic architecture was informed by his willingness to establish a continuity with tradition. Reynolds (1998:39), who worked for Fox in his Worcester office, suggests that it was the simpler single pitched workers' houses that Fox found inspiration in, rather than the larger and more ostentatious homesteads of the area.

Jean Welz⁸⁷ (1900-1975) must have been influential in this regard, as Fox notes that he often visited the office, critiqued their designs and encouraged them to look closely at the vernacular architecture of the Boland (Anon, 1979:20; Fox, 1998:27). But underlying the yearning for a connection with place through tradition there exists a classical formalism in Fox's domestic architecture. There is little fluidity evident in form making or spatial organization. A grid-like structure orders the plans while the extremities of the box form are rigidly adhered to.

I would argue that in all of these lie the seeds of what is essentially a classical approach. The term classical is used here not in its historically allusive sense, the nudge-nudge, wink-wink of Postmodern quotation. It refers, rather, to a system of values governed by the Vitruvian model of a sensibility based on clarity, order and firmness which yields a measured quality of delight. The qualities of the classical are that its form is linear, planar and stable, and that it achieves its compositional goal of harmony through a system of repetitive, equally accented elements. I would argue that these are qualities to be found in the key buildings of Revel's early Cape Town years (Dubow, 1998:44).

Fox (1998:28) indicates that they created small houses due to tight budgets and it must have been the simplicity and economy of means of the local vernacular that was inspiring. The late Modern Scandinavian tendency for synergy between building and landscape was also instrumental in the forming of Fox's domestic architecture. Just as Aalto's work alternated between the extremes of National Romanticism and Romantic Classicism (Frampton, 1992b:193) so did Fox's, as it mediated between the simplicity of the Cape tradition and the canonical sophistication of the Modern Movement.

If the planning has not altered in any significant way, one must ask what the significance of the houses is? It is their continuation and enlargement on the best in the local traditions of domestic architecture, while remaining wholly within the contemporary idiom? This goes further than faithful observance of tradition, such

– ⁸⁷ See Appendix J.

as white walls contrasted against dark oiled timber of doors and windows and the use of slatted shutters. The essence of this fidelity to tradition lies in questions of simplicity of form and material, of delicately poised proportions, and of honest answers to the specific and general claims of living and building (Lipman, 1962:19).

But it was the 'rightness' of the vernacular that inspired Fox. He notes (Anon, 1979:18) that "I think that when Jean Welz spoke of 'appropriateness' in architecture - just getting it right and avoiding serious mess-up, he summed up what I have been trying to do".

Fox's architecture after the Worcester period relied more heavily on the classicism of the Georgian or second vernacular.

3.2.7.1.2. The houses

House Wilson (1954) (see Fig. 3.7) is replicative of the vernacular in form and aesthetic as it relies on pitched roofs, distinctive chimney elements and small windows on approach edges. Although modern technologies were used to construct the house, white painted plastered walls and quarry tile floors reflect traditional approaches.

Revel's architecture was about putting together Scandinavian Modernism and the tectonics of traditional Cape building (Beinhart, 1998:42).

Interpretation is reflected in the functional organization, the definition of a court space by four boxes (which reflect a closure of the traditional H plan) and the reliance on large glazed openings to the rear edges for sunlight and view.



Figure 3.7. Left: Plan of House Wilson (1955), Worcester, Western Cape (Fox,1998:80). Middle: Front view (Fox,1998:81). Right: Garden view to House Wilson (Architect and Builder, April, 1958:45).

House Droomer (1955) (see Fig. 3.8) is replicative in its interpretation of the single double pitched roof and shuttered windows, but the functional organization of the Modern Movement is evident in the served and servant approach, allowing a northerly orientation for bedrooms and

living spaces. The introduction of timber clad walls refers to a Scandinavian tradition, reminiscent of Alvar Aalto's Villa Mairea, while the simplicity and internalization of the chimney express a shift from the vernacular tradition.

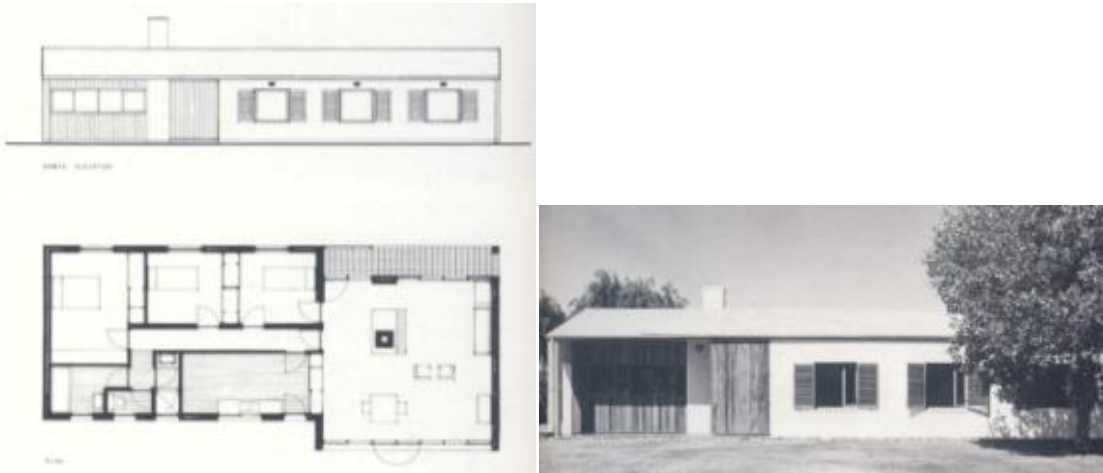


Figure 3.8. Left: Elevation and plan of House Droomer, Worcester, Western Cape (1955) (Fox,1998:84). Right: Garden view to House Droomer (Fox,1998:85).

In stark contrast, Houses Fox and Ross (1955) (see Fig. 3.9) are interpretative as they rely on a Modern Movement approach to both function and form. On approach, two parallel box forms with flat roofs are defined by solid walls with few punctures and contrasting floor to ceiling glazing on opposing edges. An uncompromising attitude to functional organization reinforces the Modern Movement served and servant relationship while simplicity of form and technology pay homage to the vernacular.

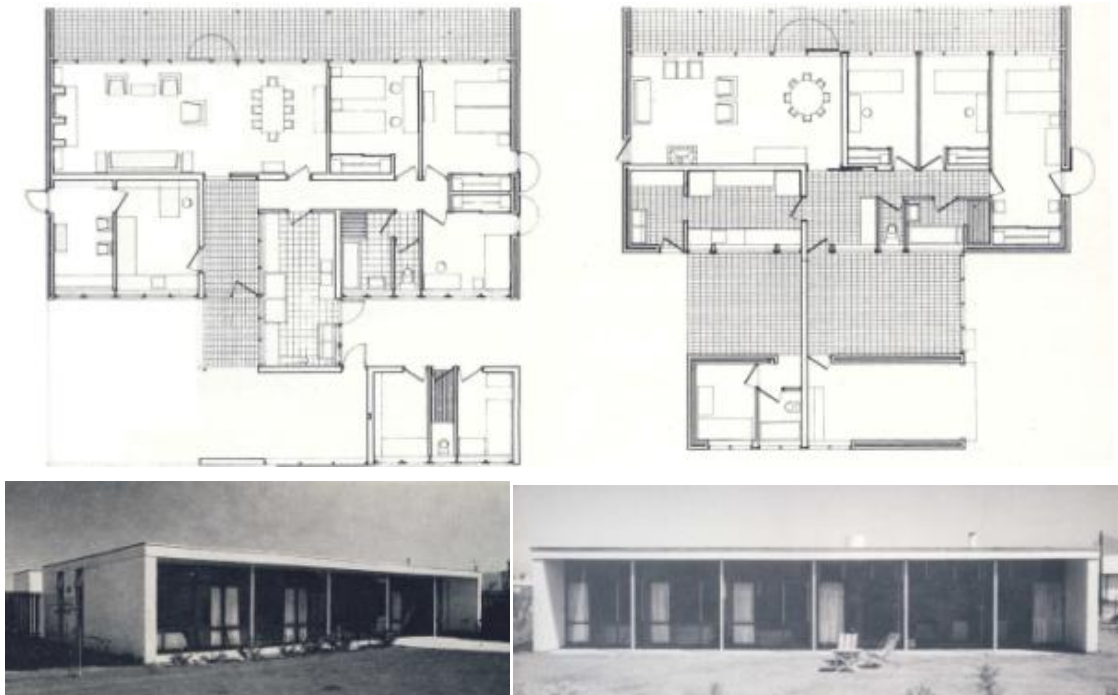




Figure 3.9. Previous page and this page left: Plan of and garden and entrance views to House Ross, Worcester, Western Cape (1955) (Fox, 1998:83) and Architect and Builder, April, 1958:46). **Previous page and this page right:** Plan of and garden and entrance views to House Fox, Worcester, Western Cape (1955) (Architect and Builder, April, 1958:42-45).

The early Worcester houses – strong, simple forms in a stark landscape – were seminal. Fox feels that the first time he really came to terms with domestic design was with House Wilson (1954), and the concepts embodied in that building have permeated much of his subsequent work. The elements were simple: a tight skin, clipped eaves, small shuttered windows or recessed glass walls, simple pitched roofs (there were also some flat-roofed examples more suggestive of the pure 'Fox box'), an atrium plan, brick-paved surfaces, pergolas supporting deciduous climbers and ubiquitous white walls. There was nothing very innovative or original, but in this particular combination – informed by the Bauhaus, Sweden and Cape vernacular – the houses represented a new yet old image in the Western Cape. This aesthetic was not very popular in Worcester, perhaps because it resembled too closely that of the simple farm outbuildings of the area. But Fox had made his mark (Fox, 1998:13).

An interpretative design approach is used in Houses Fox and Ross and is extended in the 1959 House Giannelos in Camps Bay, where an ordered concrete frame system is used to deal with the steeply sloping site. Fox (1998:90) indicates that the proportions were based on the classical system of a square within a semi-circle, illustrating a synergy between the canons of Modern Movement space making and Classicist attitudes to form. Fox's houses after 1960 seem to shift influence to Modern Movement or Scandinavian (Aaltoesque) form, such as houses Vlok in 1963 and Fisher and Faure in 1967, which rely on internal and external finishes to achieve traditional connection. House Faure's box-like forms with roofs hidden behind parapets bear a striking resemblance to the 1930 Rothenberg House in Copenhagen (see Fig. 3.10) by Arne Jacobsen⁸⁸ (1902-1971).

– ⁸⁸ See Appendix J.



Figure 3.10. Left: Rothemborg House (1930) in Clampenborg, Copenhagen by Arne Jacobsen (De Corral, 1995:30). **Right:** Front view of House Faure, Bloubergstrand, Cape Town (1967) by Fox (Fox, 1998:109).

Interspersed with the houses were larger commissions such as the Deanery in 1960, where Fox relies less on the first Cape vernacular and more on Georgian manipulations (second Cape vernacular), due perhaps to the influence of the City Bowl context.

3.2.7.2. Pius Pahl

In 2001, Pius Edmund Pahl (1909-2003) received a Gold Medal from the South African Institute of Architects (SAIA) for his dedication to architecture and the wise and exemplary models he produced. At a ceremony to award Pahl Life Membership of the SAIA in 1987, Kench (1988:43) described the scene as follows:

Around the walls of the gallery were plans and photographs of Pahl's most important work in South Africa. Covering his career since his arrival in the country in the 1950's, they were an eloquent visual summary of the architect's creative maturity. Dominated especially by his houses in the Stellenbosch area, the images are elegant, 'complex but not complicated', harmoniously blending brick, wood, steel and glass. They are also perfectly atuned (sic) to the landscape of which they are a part.

Pahl trained at the Bauhaus in Dessau from 1930 onwards. The school had shifted from a theory, design and craft bias to a more technological and functional education. Pahl's influences were driven initially by the rationality of Hannes Meyer's⁸⁹ (1889-1954) functionalism exhibited through grid-ordered designs, glass curtain walls, flat concrete roofs and stucco finishes. This formal rigidity was furthered by the town planning schemes implemented under the guidance of Hilberseimer⁹⁰ (1885-1967) (Anon, 1998:19). But Tzonis (2003:41) notes that a regionalist inflection had begun to appear in Hilbersheimer in the early 1930s and this must have sensitised the young Pahl to issues of place. From his fourth semester he was taught by Mies

– ⁸⁹ See Appendix J.

– ⁹⁰ See Appendix J.

van der Rohe⁹¹ (1886-1969) and the earlier rationality gave way to a freer expression with concentration on the unification of internal and external spaces (see Fig. 3.11).

Mies' Farnsworth house (1946) as well as the Tugendhat house (1930), find expression in Pahl's housing studies under Mies. Student studies of housing in walled courts (1931) were concurrent with similar projects that Mies was working on at the time. These houses were wholly bound by their rectangular frame with spatial continuity inside interrupted by carefully placed glass and solid walls, and partially roofed over courts. Influences of Corbusian form and the five points of Modern Architecture can be detected in his final project, "Haus am Gardasee" (1932) (Anon, 1998:19).

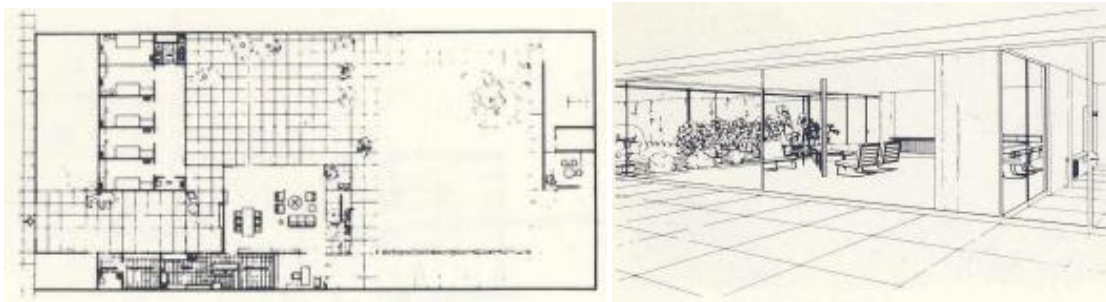


Figure 3.11. Left: House Dessau (1930s) plan. Right: House Dessau perspective (both UIA International, 1985:60).

Pahl received many prizes for his work and finished his studies with Bauhaus Diploma no. 88 in 1933 (Kench, 1988:44). In *Bauhaus 1919-1933: Workshops for Modernity*, Bergdoll and Dickerman (2009:208) note that his student work integrated furnishings, building and landscape in simple and economical ways, attributes that found a suitable home in the vernacular of the Stellenbosch region that he was to eventually work in.

Like Mies, he incorporated curtains to shield his glass walls and groupings of furniture (designed by Mies with Milly Reich) to define activity areas within the flowing open spaces. His delicate drawings reveal dexterity in handling a formal repertoire that went beyond Mies's own distilled language emulating, alternatively, Le Corbusier's plasticity (a beach house of 1932-33 has pilotis, strip windows and roof terrace) or Hilbersheimer's (sic) rationalism (Bergdoll & Dickerman, 2009:208).

It is this mediation between plasticity and purity of form that can be seen in the later South African work. After completion of his studies he undertook a study tour to Switzerland, Italy and Tunisia (Bergdoll & Dickerman, 2009:208) and then worked for a number of years with state and private practices in Switzerland and Germany, designing several industrial complexes. In the spring of 1952, Pahl and his Cape Town born wife and their five children immigrated to South Africa, settling in the Stellenbosch area. Here a purist Modern Movement training and work experience were tempered in the new setting through an appreciation of place and available materials.

— ⁹¹ See Appendix J.

Pahl himself said that the fundamental tenets of the Modern Movement, as he knew them, transcend fashion and style and that adaptation to local climate, lifestyle and available technology are all that is necessary by way of change and development (Floyd, 1985:60).

3.2.7.2.1. Approach to the vernacular

Here is the spirit both of the craftsman and of the conscious artist, sensitive to the lie of the site, to the effects of light and shadow, and to the three-dimensionality of a building. He has a strong sense of architecture as sculpture, feeling that a building, like a sculpture, should be approachable from all angles (Kench, 1988:45).

It was possibly advantageous that Pahl arrived in the Cape later in his career. His German training and work experience had engrained in him a functionalist and spatially open language. He was probably fortunate, too, to not have been previously exposed to the local Cape vernacular and thus approached it with circumspection, appreciating its qualitative nature and contextual appropriateness. Pahl's approach to the vernacular is mainly interpretative as there are few, if any, replicative elements to be found in his houses. He relied on a response to climate and setting and the use of materials such as white painted walls, brick floors and timber pergolas. It was possibly Pahl's pre-Bauhaus training as a craftsman that fostered this technological affinity. The response to the vernacular is also more experiential and focuses attention on relationships to view and solar orientation and the development of thresholds between inside and outside. These are possibly the result of a synergy between the tenets of the Modern Movement and the influence of the vine-covered pergolas common in Stellenbosch. Pahl furthers his European mediation between plasticity (here perhaps a combination of Le Corbusier's work and the first Cape vernacular) and the purist aspects of the Modern Movement such as the structural grid and economies of planning. He also furthers his exploration in the courtyard house typology very similar to the Fox explorations in Worcester. But the formal restraints of his education proved limiting in his three dimensional exploration, as little volumetric expression is evident in most of the houses.

3.2.7.2.2. The houses

Thirty years ago, Stellenbosch was a charming country town, where modern architecture was almost unknown. Old Cape Dutch and Victorian buildings set the style of the place. Pahl soon demonstrated that his kind of architecture was equally suited for this old-world setting. Among his early projects was the restoration in 1959 of an old Cape Dutch house, Brandwacht. Here he restored the outside, but introduced a distinctive modern note into the interior (Kench, 1998:45).

One of Pahl's first houses (see Fig. 3.12), in Krigeville in Stellenbosch for Professor Trumpelman and his wife (an author and ceramicist respectively), is an eclectic combination of an ordered courtyard plan (no doubt a further exploration of Pahl's student work and a reinterpretation of the local vernacular) and a Miesian continuity of space with the partial containedness of the Cape vernacular. This was probably also an extension of Pahl's student work where he balanced contained and lightly framed spaces. It relies heavily on the experiential approach from below turning the viewer through one hundred and eighty degrees to expose the panoramic view of the mountain.

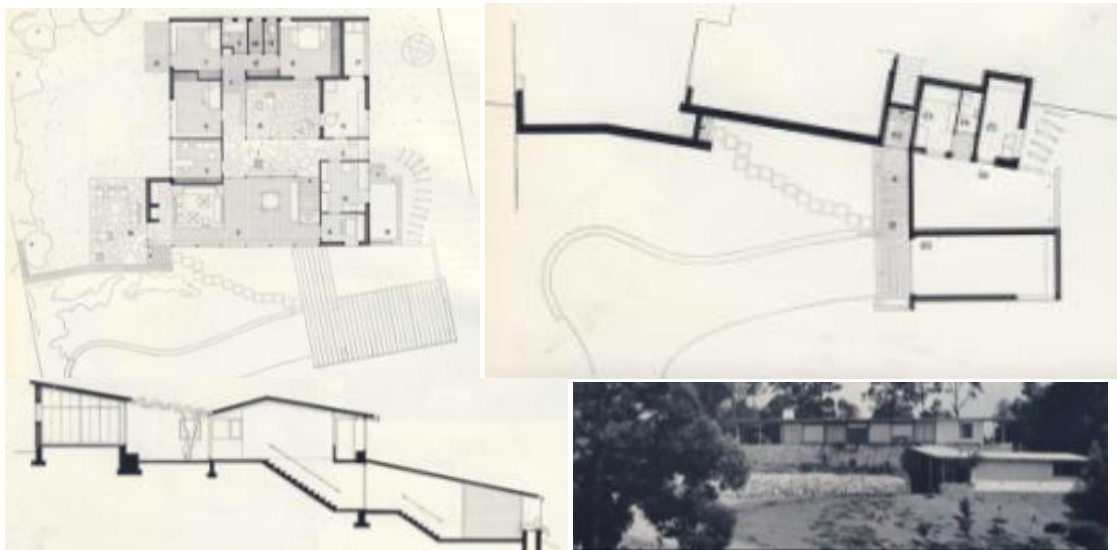


Figure 3.12. Top: House Trumpelman, Krigeville, Stellenbosch, 1954, ground floor and lower ground floor plans. Bottom: Section and view from the garden below (all Architect and Builder, V8.1, January 1958:38-42).

The front-stoep-backyard concept has always been stronger in South Africa than that of the courtyard, though a few notable examples of courtyards are to be seen in town and country houses in the Cape and in indigenous African architecture (Lennard, 1965:15).

The steeply sloping site with views to the north called for the house to be placed high up. The form of the building plays on the tectonic frame raised on a stereotomic brick platform. The design is interpretative in its relationship to the vernacular, relying on a lighter tectonic and more open quality to the courtyard plan to establish a greater synergy with the landscape. It is also reminiscent of Fox's House Wilson of 1954 but freer and lighter in its interpretation. The slightly pitched roofs hover between those of the local vernacular and Miesian flat roofs, and it is one of the few houses where Pahl shifts from the monotony of a single volume. Walls are white painted plastered brickwork and the balance of wall and window openings refer to that of the old.

House Verreweide⁹², also in Stellenbosch (see Fig. 3.13), is a restrained design that required a combination of two living units. A limited interpretative approach is taken to the vernacular mainly in terms of materials and finishes and the simple double pitch roof. The northerly orientation allows for adequate solar gain and the roof edge is broken open at times to create a pergola type structure. This element was developed in later houses to emulate that of the old vine covered pergolas of the vernacular within a Miesian language. The main living area with its slanted edge walls is reminiscent of Fagan's Keurbos house where a continuity of space is achieved between inside and outside, counterbalanced by the more solid bedroom walls



Figure 3.13. Left: House Malan, Stellenbosch, c.1958, plan. Right: View from the garden (all Architect and Builder, January 1958:45-47).

Built in 1965, House Malan in Parow North, Cape Town (see Fig. 3.14), relies on an interpretative understanding of the Cape vernacular through its tectonic qualities framed within a Miesian structural logic. Pahl further develops his student inspired courtyard plan and fuses a light framed Modern Movement aesthetic with the stereotomic nature of the Cape wall to define private zones. Bagged and painted brickwork is used to emulate the textural qualities of Cape walls. Modern Movement principles are applied through a fusion of inside and outside spaces, and the Cape pergola tradition is reinterpreted in the extensive partly covered terraces to both front and rear. The sloping site provides opportunities for extensive views and a reduction in building volume to foster a close connection with the singular formal nature of the vernacular tradition.



Figure 3.14. Plan and street elevation, courtyard house, Parow North (Architect and Builder, January 1965:17).

– ⁹² This house was unfortunately demolished in 2011.

3.2.7.3. Other architects

The influence of the inherited Cape vernacular was extended to the work of other local architects (see Fig. 3.15):

In Cape Town, Revel Fox, Michael Munnik and others, investigating their Cape Dutch heritage, have maintained the materials and proportions of that era within the context of Twentieth Century home building (Teeger, 1965:7).

Sam Abramson⁹³, Mike Munnik, Colyn and Meiring, Naudé, Papendorf, Van der Merwe and Meyer, with Adèle-Marie Naudé (later Naudé Santos) were influenced by the Cape vernacular and extended the tectonic tradition. The 1974 Newlands house by Julian Elliott similarly expresses the painted brickwork tradition. Even a 1982 house in Harare by UCT-trained Keith Murray⁹⁴ (1946-) exhibits tectonic similarities.



– ⁹³ Fagan notes (2010a) that Sam was, in his view, one of the few architects in Cape Town working in a similar architectural idiom.

– ⁹⁴ See Appendix J.



Figure 3.15. Previous page: House Abramson, Newlands, Cape Town (Sam Abramson architect), south east view (Wale, c.1964:103). **Top left:** House Naudé, Kenilworth, Cape Town (Naudé, Papendorf, Van der Merwe and Meyer with Adèle-Marie Naudé), south-west facade (Architect and Builder, April 1967:9). **Top right:** House, Durbanville, Cape Town, (Colyn and Meiring), street view (Architect and Builder, July 1962:12). **Bottom left:** House Buurman, Belville, Cape Town, (Colyn and Meiring), north view (Architect and Builder, April 1964:8). **Bottom middle:** House, St. James, Cape Town (Munnik Visser), entrance courtyard (Architect and Builder, April, 1962:10). **Bottom right:** House Elliot, Newlands, Cape Town (Julian Elliot architect), exterior and interior views (Architecture South Africa, March/April 2003:cover and 8).

Clive Chipkin (1993:294) notes that a particular domestic vernacular architecture began to appear in the Johannesburg suburbs in the 1950s and 1960s.

Interior walls are bagged with a granular texture or left in clinker brick or in earth-bound fair-face walling, sometimes painted startling white in the interiors. Plaster is a less frequent option, despite the fact that South Africa has a long plaster tradition for overlaying rough-and-ready building work. Living areas are paved with red or dark quarry tile laid in a square pattern or in brick stretcher bond, or they may be in square-cut slate flags or in paving brick ... Large glazed sliding doors open out onto patios (Chipkin, 1993:295).

Although this architecture bore many similarities to a Pretoria regional aesthetic through the use of simple forms and materials (particularly the quarry tiled floors and white painted, bagged brickwork walls) it must have, to some extent, been influenced by the work of Baker and later Eaton. Other influences were a mediated modernist education (tempered by its Corbusian Mediterranean leanings) and the work of Niemeyer. Chipkin (1993:297) notes that Donald Turgel who trained in the modernist style under Martienssen at Wits, spent three years in Morocco after a London sojourn and on returning to South Africa named his first house Marrakesh. Turgel noted that there was no direct copying but that “the style is developed according to the dictates of our sunny climate and the want of South Africans for a great deal of comfortable outdoor living” (Chipkin, 1993:298).

Norman Eaton imbued many of his buildings, such as the Van Wouw (1937) and Anderssen houses (1949-50) in Pretoria, with an internal Cape aesthetic⁹⁵, possibly fostered through his high school education in the Cape, his university field trip to measure up old Cape buildings with prof. Geoffrey Pearse⁹⁶ (1885-1968) and his association with Baker. Eaton believed that

... a distinctive contemporary South African architectural idiom can again be achieved, as had been the case in 18th and 19th century Cape Dutch architecture. The essence of this new architecture will be an understanding and appreciation of the underlying principle of Cape Dutch architecture ... (Du Toit, 1983:49).

University of Cape Town trained architects (see Fig. 3.16) furthered the aesthetic of the Cape tradition in other contexts around the country. Barrie Biermann's own house displays a masterful eclectic synergy between the plasticity and tectonic of the Cape vernacular, Modern Movement open planning, and the Durban climate. Through his role as lecturer at the University of Natal he fostered a large group of sympathetic contextualists who were equally inspired by Brazilian modernism. Hans Hallen⁹⁷ and Danie Theron, as well as Paul Mikula⁹⁸, all exhibit the tectonic and plastic quality of the Cape vernacular walls in their work. Fagan (2008) notes the aesthetic emphasis of Cape architecture in Biermann's work:

The white walled aesthetic was after all the typical Cape way of building, but its use in the hot and humid Natal climate, where mass is probably a disadvantage, was presumably a stylistic choice. I am not sufficiently familiar with the Natal work to judge, but do remember that Biermann's own house, although employing white walls, was virtually a ventilating breezeway, in essence very different to the Cape.

The architecture had its inheritance in the necessity for simplicity of form and economy of means, but it must also have been influenced by external sources such as Corbusian Mediterraneanism, and the influence of Biermann's trips to South America and the Modernist adaptations that were taking place there.



– ⁹⁵ McTeague (1983:47) describes Eaton's use of the small paned window and triple shutter as a Cape reference.

– ⁹⁶ See Appendix J.

– ⁹⁷ See Appendix J.

– ⁹⁸ See Appendix J.



Figure 3.16. Previous page left: Anderssen House (1949), Pretoria, Norman Eaton architect (UIA International, 1985:22). **Previous page right:** House Biermann (1962) Barrie Biermann architect. **Left:** House Mikula (1965-7), Paul Mikula architect (Architecture SA, May/June 2005:14). **Right:** House Manor Gardens, Durban (1973) Hallen and Theron (Architect and Builder, February 1973:34-35).

The influence of the first Cape vernacular has resulted in a consistent and vibrant architectural lineage. It has inspired many architects through the years and will probably continue to do so. Chapter 7 will describe Fagan's attitude and architectural approach towards the vernacular and the development of the Fourth Cape vernacular.

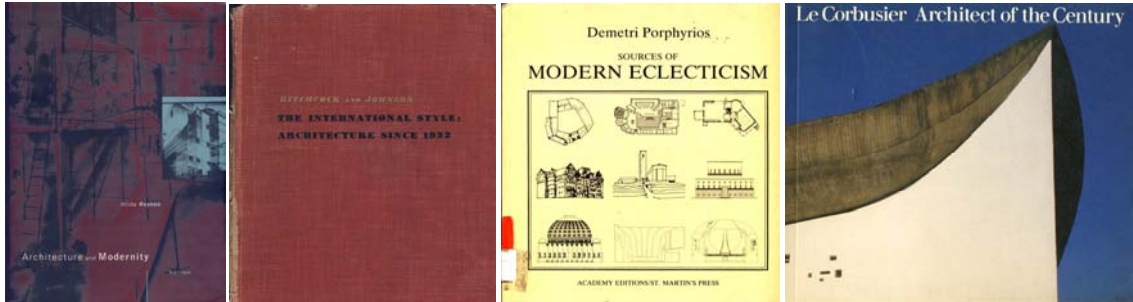
3.3. Summary

Vernacular architecture has been defined as a traditive process that demonstrates a consistency and repetition, as well as the development of an approach to establish a tradition. A seminal neo-vernacular was formed in the 1950s and 1960s in the Western Cape, South Africa. The inherited Cape Dutch tradition was adapted through the influences of the British occupation along with Arts and Crafts influences through Baker and his later following. Architects such as Fox and Pahl attenuated replicative and interpretative approaches to merge inherited vernacular principles and Modern Movement influences to form a fourth Cape vernacular.

The next chapter will focus on Fagan's relationship with the Modern Movement and its effect on South African and Cape vernacular architecture.

Chapter 4

MODERN MOVEMENT MEDIATIONS



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

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

Modern Movement terminology will be explained.

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

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

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

4.1. Introduction

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

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

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

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

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

– ⁹⁹ See Appendix J.

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

4.2. The Modern Movement – definitions and clarifications

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

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

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

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

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

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

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

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

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

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

4.3. Modern Movements

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

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

4.3.1. The first Modern Movement

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

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



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

— ¹⁰² See Appendix J.

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

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

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

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

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

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

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

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

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

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

– ¹⁰⁴ See Appendix J.

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

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

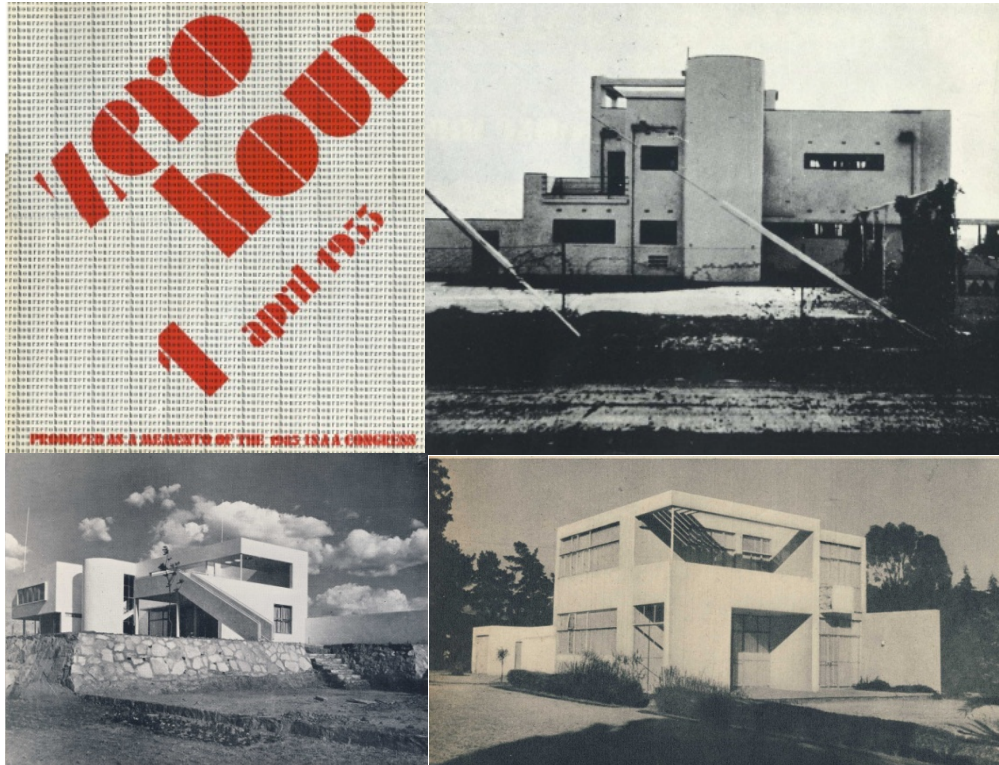
Martienssen's direct contact with Le Corbusier paved the way for the distillation of Modern Movement tenets mainly in the Transvaal, after he had taken over the editorship of the SAAR in 1932. Together with a small band of like-minded protagonists, Gordon McIntosh (1904-1983) and Norman Hanson¹⁰⁶ (1909-1991)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

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

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

– ¹⁰⁶ See Appendix J.

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



Paris, 23 september 1936.

My dear Martienssen,

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

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

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

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

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

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

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

Fraternally to all of you,

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

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

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

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

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

– ¹¹⁰ South African Architectural Record.

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

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

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

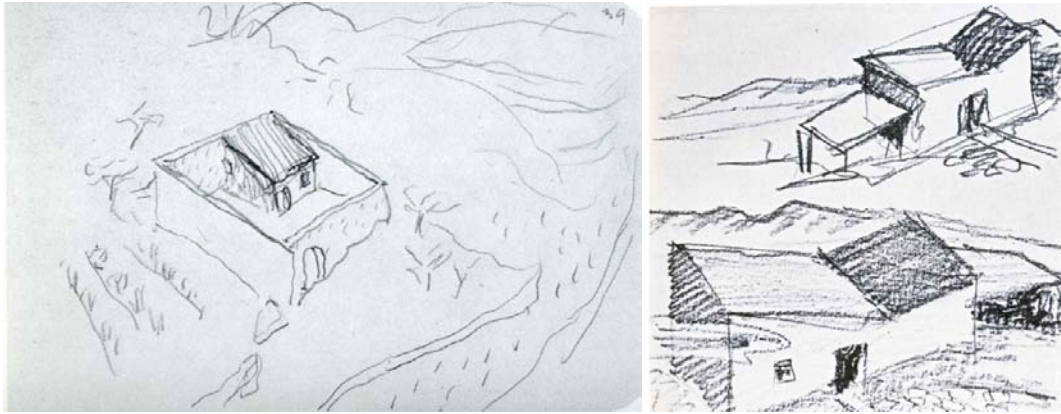


Figure 4.3. Left: Le Corbusier sketch of house and garden in Catalonia 1928 (Curtis, 1987:239). Right: Martienssen sketch of rural architecture (Herbert, 1975:208).

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

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

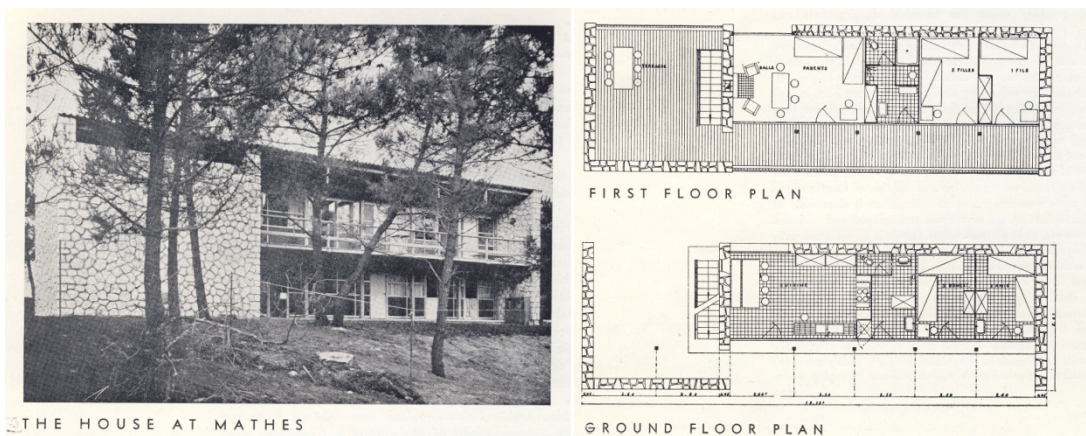


Figure 4.4. Left: Le Corbusier's Mathes house published in the March issue of the South African Architectural Record of 1938 (Howie, 1938:84).

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

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

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

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

4.3.3. Le Corbusier's mediations

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

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

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

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

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

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

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

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

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

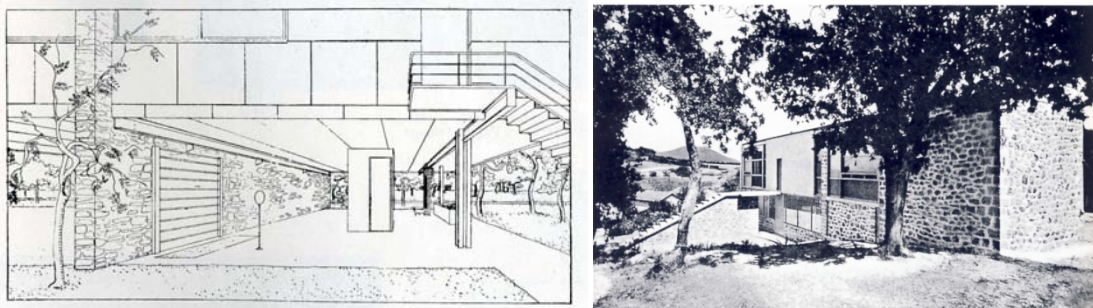


Figure 4.5. Left: View of Maison Loucheur (1929) showing the tectonic play of organic stone wall and engineered facade (Le Corbusier & Jeanneret, 1943:197). **Right:** House for Madame de Mandrot, near Toulon, 1931. Construction is of load bearing rubble stone throughout with timber framed openings (Frampton,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

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

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

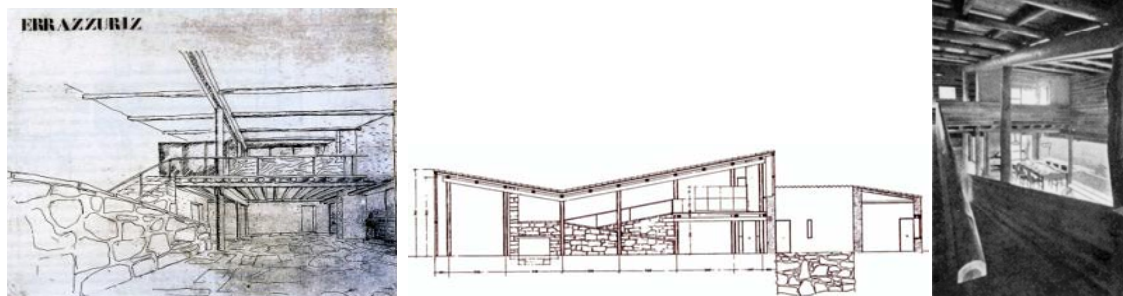


Figure 4.6. **Left:** Le Corbusier and Jeanerret: Maison Errazuris, Chile, 1930: interior (Frampton, 2001:133). **Middle:** Section through Maison Errazuris (Frampton, 2001:133). **Right:** Interior of House Errazuris (Joedicke, 1969:16).

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

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

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

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

directed much of the architecture of the third Modern Movement.

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

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

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

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

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

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

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

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

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

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

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

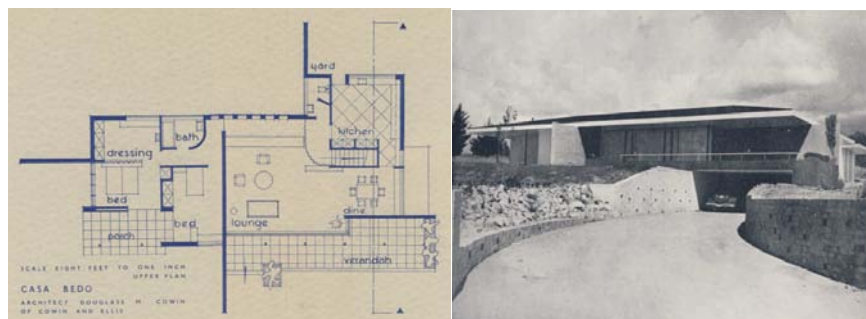


Figure 4.7. Left: Plan of Casa Bedo by Douglass Cowin, 1936 (Anon, 1938: insert). **Right:** Entrance view of Casa Bedo (Anon, 1938:428).

– ¹¹⁹ the Second World War.

– ¹²⁰ See Appendix J.

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

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

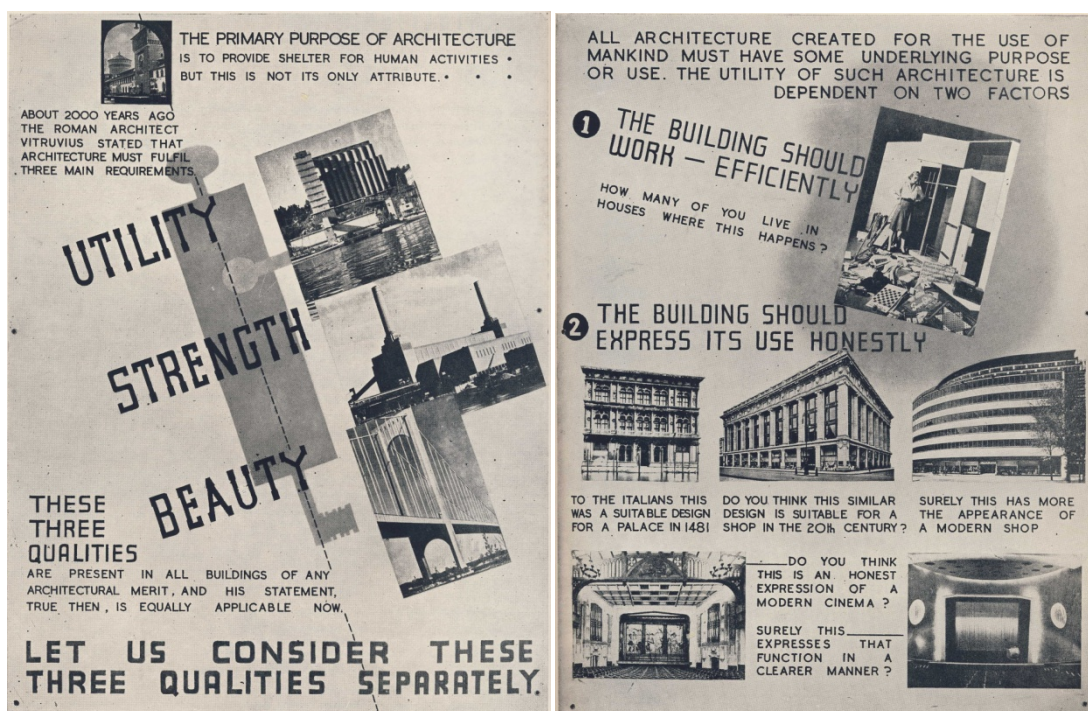


Figure 4.8. Left: Two pages from the 1947 Wits exhibition catalogue showing (on the left) the three essential Vitruvian qualities necessary in architecture and (on the right) Modern Movement influences (Anon, 1948:104-105).

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

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

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

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

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

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

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

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

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

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

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

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

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

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

4.3.5.2 Colonialism and Nationalism

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

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

– ¹²² See Appendix J.

– ¹²³ See Appendix J.

– ¹²⁴ See Appendix J.

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

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



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

4.3.5.3 Style and the public: fashion or fission?

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

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

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

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

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

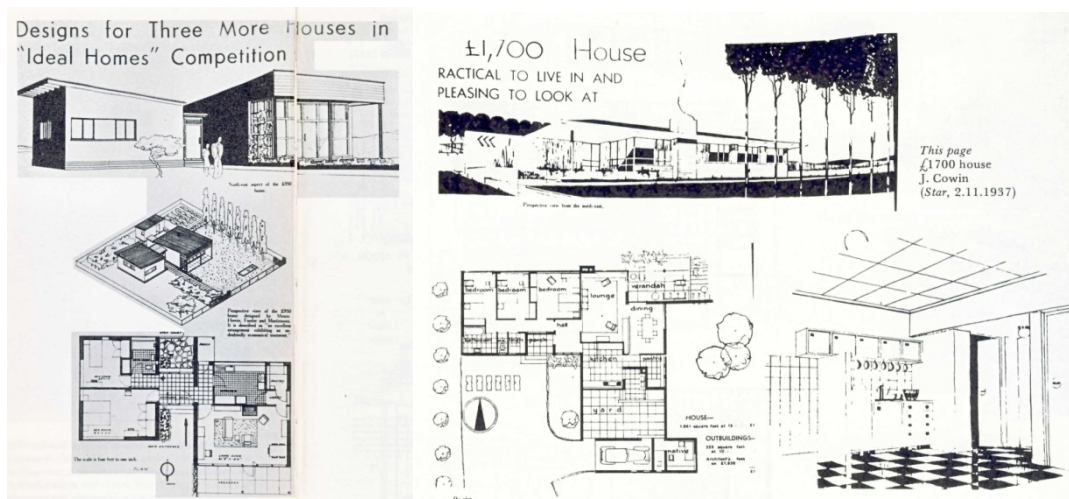


Figure 4.10. Left: Martienssen, Fassler and Howie's £950 entry to the Argus Ideal Homes Competition of 1937 (Herbert, 1975:160). Right: Cowin's £1700 entry (Herbert, 1975:162).

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

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

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

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

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

4.3.5.4 Formality and practicality

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

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

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

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

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

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

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

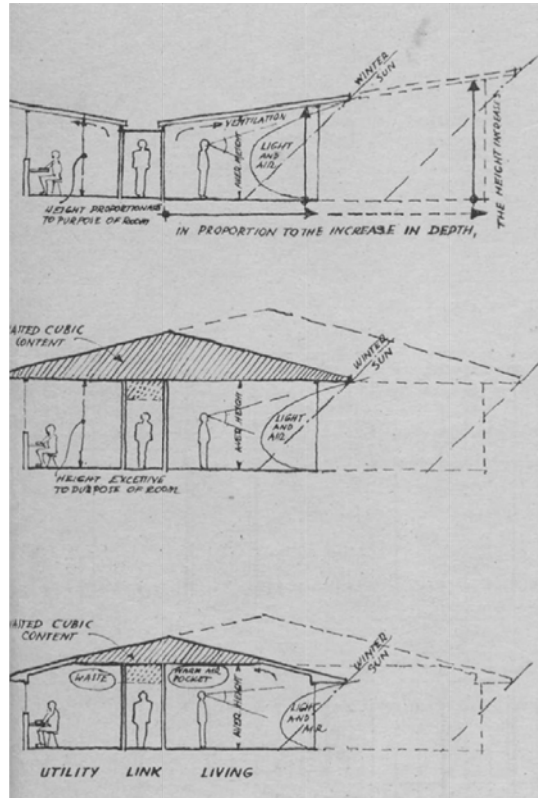


Figure 4.11. Left: Hellmut Stauch's series of sections showing sun angles for optimum winter penetration (Stauch, 1945:207).

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

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

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

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

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

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

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

– ¹²⁸ See Appendix J.

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

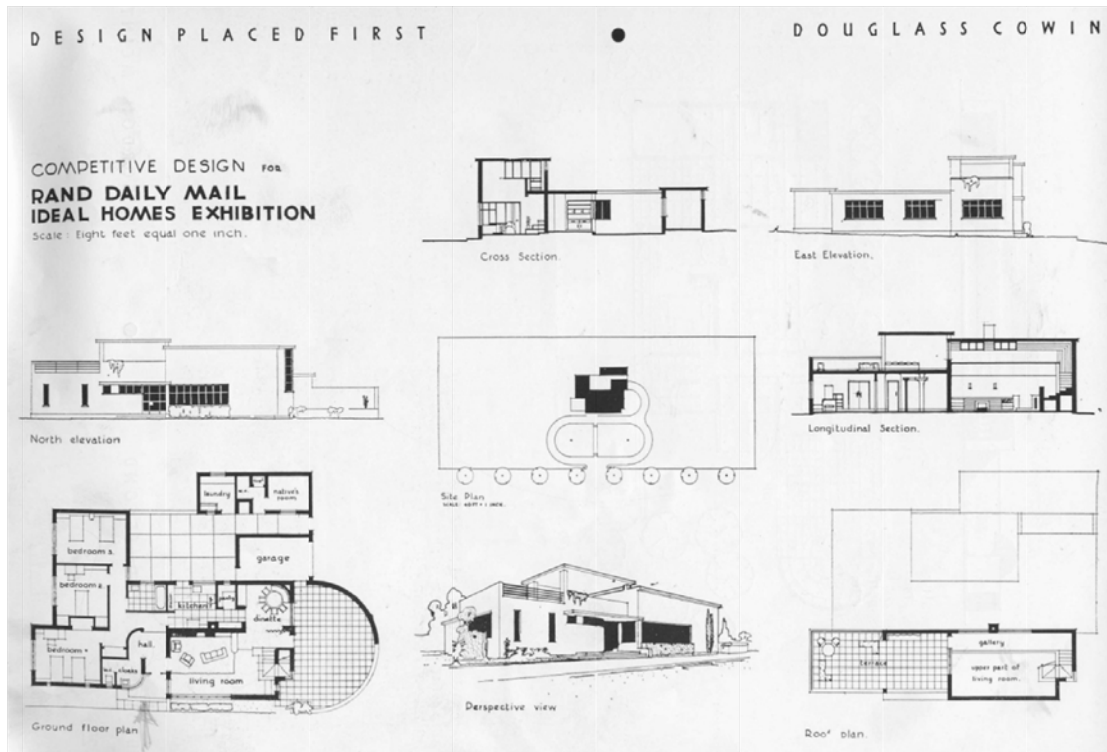


Figure 4.12. Left: Cowin's winning entry to the Rand Daily Mail Ideal Homes Competition of 1934 (Cowin, 1934:257).

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

4.3.5.6 The Transvaal and the Cape (simplicity and appropriateness)

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

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

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

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

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

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

– ¹³¹ See Appendix J.

– ¹³² See Appendix J.

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

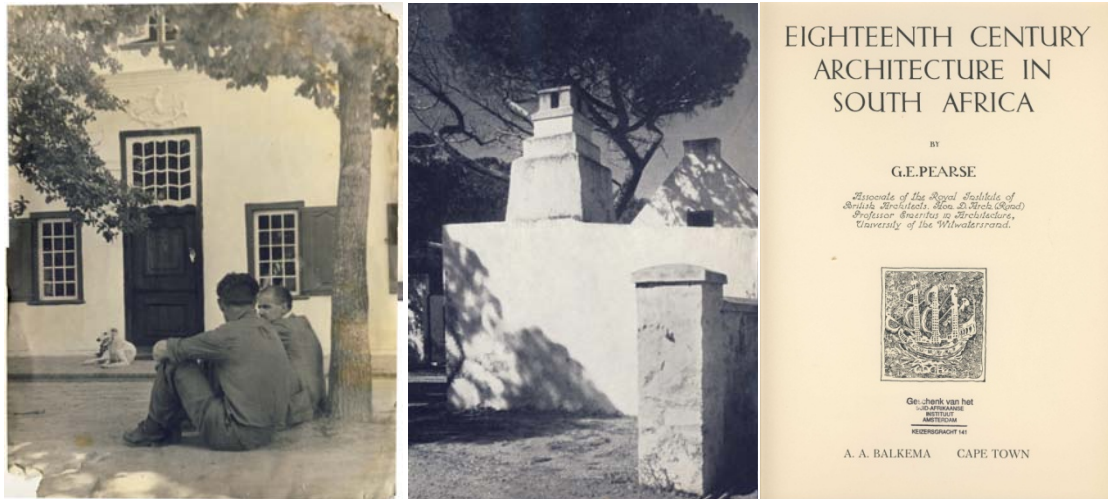


Figure 4.13. Left: Pretoria university lecturer Basil South and head of school Prof A.L. Meiring at Ida's Valley in the Cape during their visit with the students around 1945 (Fagan archive, undated). Middle: Image from "Essays in Half-Tone" by Cole Bowen (1957). Right: Inside cover of Pearse's Eighteenth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

4.3.5.7 Practicality and economy

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

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

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

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

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

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

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

Alternative building materials were suggested by Biermann in 1945 in his

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



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

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

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

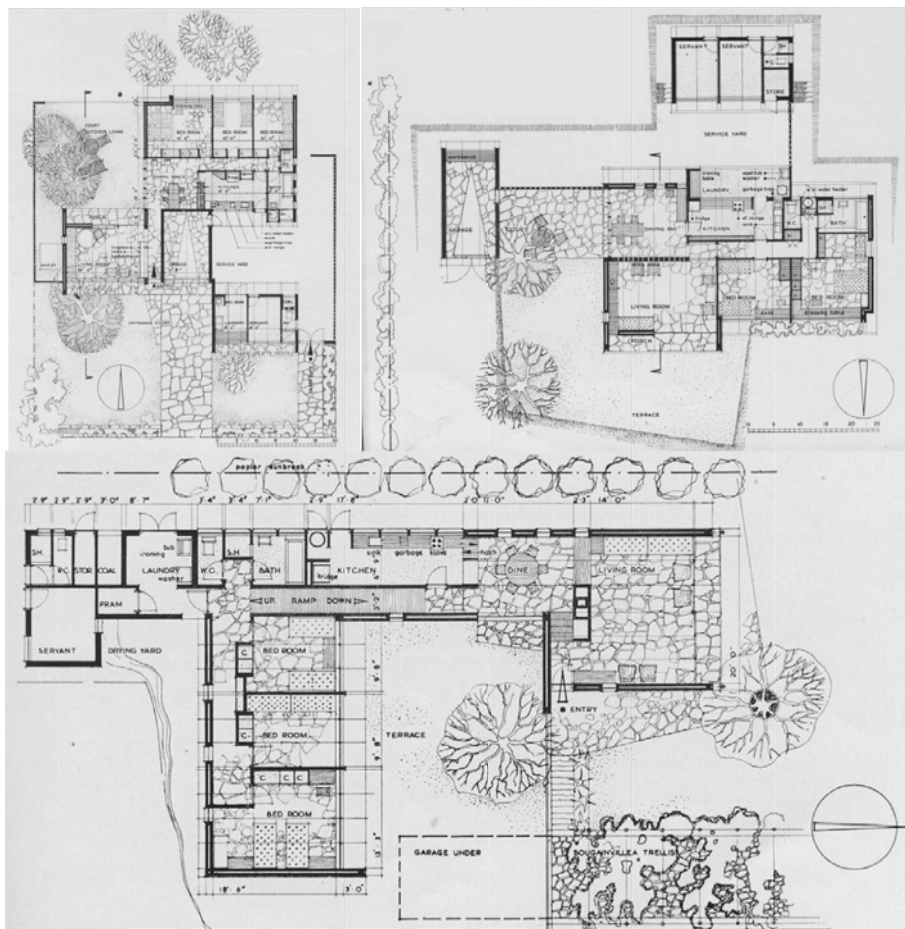


Figure 4.15. Three Cole Bowen plans. **Top left:** House Hester of 1950 (Cole Bowen, 1953:38). **Top right:** House Vincent of 1950 (Cole Bowen, 1953:43). **Bottom:** House Collins of 1951 (Cole Bowen, 1953:46).

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

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

4.3.5.8 Johannesburg and Pretoria

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

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

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

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

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

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

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

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

responsible for its creation.

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

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

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

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

4.3.5.9 Foreigners and locals: a synergistic relationship

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

mediated modernity as

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

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

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

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

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

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

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

– ¹³⁶ See Appendix J.

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

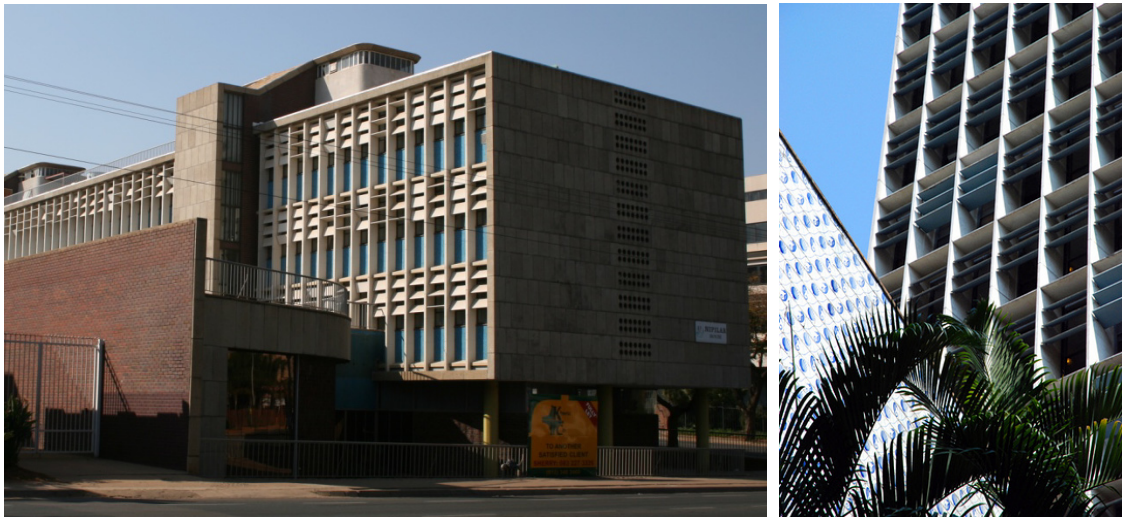


Figure 4.16. Left: Stauch's Meat Board building of 1952 in the centre of Pretoria (Author, 2008). Right: Niemeyer's Ministry of Education and Health building in Rio de Janeiro completed in 1943. (<http://www.flickr.com/photos/14479222@N04/6783311971/> [Accessed 02/05/2012]).

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

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

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

4.3.5.11 Industry and art (standard and unique)

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

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

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

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

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

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

– ¹³⁸ See Appendix J.

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

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



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

4.3.6. Summary

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

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

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

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

Chapter 5

REGIONALIST REINTERPRETATIONS



The other tradition of Modern Architecture - the uncompleted project cover (St. John Wilson, 2007). *Architecture after modernism* cover (Ghirardo, 1996). *Critical regionalism: Architecture and identity in a globalised world* cover (Lefaivre & Tzonis, 2003). *Architectural Regionalism: Collected Writings on Place, Identity, Modernity, and Tradition* cover (Canizaro, 2007). *Architecture in South Africa* cover (Cumming, 1934).

This chapter contextualises Gabriel Fagan's regionalist responses.

A brief history and definitions of regionalism will be given.

Types of regionalist responses will be illustrated.

A framework for understanding regionalist approaches will be generated.

Approaches to regionalism will be outlined.

5.1. Introduction

A survey of architectural regionalism spanning the twentieth century yields a heterogeneous collection of motivations and prescriptions – an ongoing theoretical discourse. This may suggest that the variety of regionalist positions are part of the pluralistic attitude considered endemic to postmodern theory, where no singular view is taken to be dominant. All views are competing versions of reality in the postmodernist "sensitivity of inclusion." It may also suggest that heterogeneity is intrinsic to regionalist theory, in which there are not one but as many regionalisms as regions, each specific to its locale and historical circumstance. As such, it is a kind of meta-theory that has only local application and meaning. I think it is fair to say that both are the case; in part, this has much to do with the lack of clarity with which regionalism is understood and practiced. It also has to do with tensions inherent to its dialectical structure. Regionalism is never a singular theory or practice but is most often a means by which tensions – such as those between globalization and localism, modernity and tradition – are resolved (Canizaro, 2007:16).

Fagan's childhood experiences and close relationship with nature through his sailing exploits¹⁴² have provided a solid foundation for an architecture that exhibits a synergy with physical place. His appreciation of the inherited local architectural traditions (that have developed over three hundred years) have for him reinforced the importance of socio-cultural practices. These lessons have created a palette for new regional solutions. Not that his architecture is a slave to these concerns. Fagan is selective in his approach, choosing to express and heighten different qualities that exist in each place he works in. This chapter will contextualise Fagan's regionalist influences. Chapter 7 will explain his response to issues of place, but first the meaning of region and regionalism will be explained and a dialectic of regional approaches will be postulated.

5.2. Definitions and clarifications

In physical terms, 'region' means a boundary of space defined by the extremes of culture and nature (Canizaro, 2007:18). The root of the word 'regionalism' is the Latin *regere* meaning 'to rule', and stems from the Roman imperial practices of territorial management (Canizaro, 2007:16). In general terms, regionalism is a geographical term for "socio-political movements which seek to foster or protect an indigenous culture in particular regions" (Bullock & Stallybrass, 1997:532).

It can be argued that to respond regionally in architecture, an intimate understanding and appreciation of the qualities of place and its relationship to socio-cultural practices is necessary. At a more pragmatic level, sound knowledge would be needed of the geographical characteristics of a region (such as climate and topography) and building traditions (available materials and

– ¹⁴² See Chapter 6.

technologies). These approaches can be traced throughout the history of architecture. An early and succinct description was given by Vitruvius (c. 46 B.C.; 1998:170):

If our designs for private houses are to be correct, we must at the outset take note of the countries and climates in which they are built. One style of house seems appropriate to build in Egypt, another in Spain, a different kind in Pontus, one still different in Rome, and so on with lands and countries of other characteristics.

Regional architecture responds to culture through a reinterpretation of traditional built form. It also responds to social aspects through a reinterpretation of varying ways of living. Tradition acts as the controlling mechanism that orders the other factors.

If indigenous or primitive architecture can be described as a mainly unconscious response to place (building by necessity), then vernacular architecture can be termed as partly conscious, as it expresses habits of thought, and repetitions of building type and ways of living. It promotes the local and is thus regional. Regionalism, then, is a self-conscious response to regional conditions. Architects will choose what to respond to, not out of necessity but because of the options available and, to put it simply, because they can. As Fagan (1982:3) has remarked:

Whatever you build today, is thus no longer determined by simple tradition – it has become self conscious design. And as soon as design becomes self conscious, it goes beyond the scope of the amateur.

Canizaro (2007:18) argues that at the heart of any regional response is a *resistance* to standard forms, a concern for authenticity and a fostering of a connectedness between people of a specific culture through common associations such as history and ecology. He further indicates (2007:21) that a regional approach (which results in regionalism) can be defined as a

... concept, strategy, tool, technique, attitude, ideology or habit of thought. Despite its many manifestations, collectively it is a theory that supports *resistance*¹⁴³ to various forms of hegemonic, universal or otherwise, standardizing structures that would diminish local differentiation. These theories propose alternatives in the form of methods and criteria for the respect, revitalization, and, if necessary, reconstruction of life along regionally determined lines. It is a self-conscious set of theories, which distinguishes it from the vernacular – the response to local conditions by necessity, not by choice.

Canizaro's supposition that regionalist architectures are inherently resistive is, however, contestable. Regionalist responses will, by the very nature of the difference in regions, be heterogeneous in nature. Some regions will be more susceptible to outside influence than others, due to their location (closer to or farther from universalizing tendencies) or perhaps the lack of an entrenched tradition. It can be argued that regionalist architectures resist *and* accept both

– ¹⁴³ My emphasis.

standardizing tendencies (that reduce local differentiation) and revivalist tendencies. The resultant mediation then shifts on a scale from radical to conservative. Acceptance of or resistance to local or global influences would depend on the value the designer ascribes to these influences. Regionalist responses can thus be more accurately described as *reactionary* in nature as they respond to the polarities of universalisation and revivalism¹⁴⁴. Boussara (1990:123) concurs with the reactionary stance but ignores the influence of the conservative end of the regionalist spectrum:

A review of the literature which attempts to identify and define regionalism not only demonstrates the divergences of definition, but also reveals the complexity, confusion and subjectivity of this literature. One theme which commonly occurs is that regionalism is seen as a reaction against the universality and uniformity of modern architecture.

Buchanan's statement below (1983:15) contradicts itself in its attempt to position regionalism against universalism. At first he defines regionalism as oppositional but then suggests that rational issues still play an important role:

Regionalism is the dialectical counter-trend to the rational and universalising force of modern architecture, especially as found in its reductive Rationalist extremes. Like the local cultures themselves Regionalism is less concerned with abstract and rational issues and more with adding sensual physicality, depth and nuance to life's experience.

In the 1980s Frampton (1986:17) extended the idea of a 'critical regionalism' (previously proposed by Lefaivre and Tzonis) as a *resistance* to universal dogmas and an *opposition* to hegemonic power¹⁴⁵. Frampton relied heavily on the Ricouerian standpoint that universalisation had destroyed traditional cultures and had resulted in the development of a mediocre civilization (Frampton, 1996:314). Frampton also alluded to the development of a hybrid system that could see, for example, the combination of traditional craft and modern technology. But his contradictory statements bias the original definition as espoused by Lefaivre and Tzonis as Frampton speaks, on the one hand, of resistance and in the same breath attempts a process of reconciliation. Lefaivre and Tzonis (2003:10) had added the term 'critical' to the regionalist debate to distinguish it from architectures that were revivalist and more concerned with the identity of the particular rather than the universal. Another reason for the addition of the term 'critical' was the Kantian influence of self- and internal criticism. To be critically regionalist, architecture had to be critical of both universal dogmas and revivalist approaches. But a further, and perhaps more important, intention was Immanuel Kant's 17th century philosophy of *uniting reason with experience*. In the latter sense, the oppositions inherent in the local-global debate were identified almost a hundred and fifty years

– ¹⁴⁴ These reflect the extremes of radical and conservative regionalisms. Universalism can result in a sense of placelessness while revivalism can engender a false traditionalism.

– ¹⁴⁵ These were informed by the writings of Lewis Mumford and first articulated in Tzonis and Le Faivre's essay "The grid and the Pathway".

before they had occurred.

Lefaivre and Tzonis's writings are suffused with contradictory statements such as Critical Regionalism recognising the value of place rather than the adoption of universal formulaic solutions. They may have argued that critically regionalist architectures are integrative, but the legacy of global solutions were perhaps too dominant at the time for the intrinsic value of their ideas to be truly and sufficiently recognised, hence the radical nature of their statement. Another contradiction is the timing of the statement. Le Faivre and Tzonis (2003:10) note that the original introduction of the term Critical Regionalism in the 1970s was descriptive of those architects who were working towards an alternative to the reductive forms of Post-Modern historicism. But in the same paragraph he and Lefaivre suggest that the debate should be shifted to that between modern and anti-modern to avoid becoming entangled in the fashionable debate of the time. Therefore most of the architects cited by Le Faivre and Tzonis and later Frampton as critically regionalist were responding to the legacy of the Modern and not Post-Modern Movement. Further, as Cassidy (2000; 2007:412) points out

In its attempt to abate the "apocalyptic thrust of modernization" the genre [of Critical Regionalism] discounts all regional manifestations that celebrate traditional notions of regional identity. It objectifies the notion of a region by seeing it as a collection of autonomous objects with particular characteristics proximate to one another in time and space. It does not recognize the collective experience of a particular landscape - the sense of regional place ... The problem is that it is an approach that treats the concept of region as a collection of self-referential objects instead of a complex contextual cultural web. Individual works of architecture are reduced to a set of formal relationships that can be freely manipulated without regard to the regional context.

Notwithstanding the contradictions inherent in Critical Regionalist theory, its value lies in the recognition that architects were responding to Modern Movement inheritances in more than one way.

Most of the important shifts in architecture that have been documented over time have been polarised reactions, but many more subtle mediations have taken place. It will therefore be argued in this thesis that a true regionalism mediates between the universal and the local, reacting to the vagaries of the intuitive/rational and the learned/experienced. As it treads the line between these concerns in a non polarised manner, a variety of regional architectural responses is formulated.

5.3. Regionalism in the twentieth century (see Fig. 5.1)

It can be argued that during the twentieth century regional architectural responses have alternated

between the conservative (conformist) and the radical (revolutionary)¹⁴⁶. Various regionalist trends can also be discerned: firstly, the inheritance of regionalist reactions, such as Romantic regionalism¹⁴⁷, which continued to influence architecture until the 1940s (Lefavre & Tzonis, 2003:16); secondly, new responses to the facile use of tradition; and thirdly, thereafter, reactions to the orthodoxy of the Modern Movement or the so-called International Style.

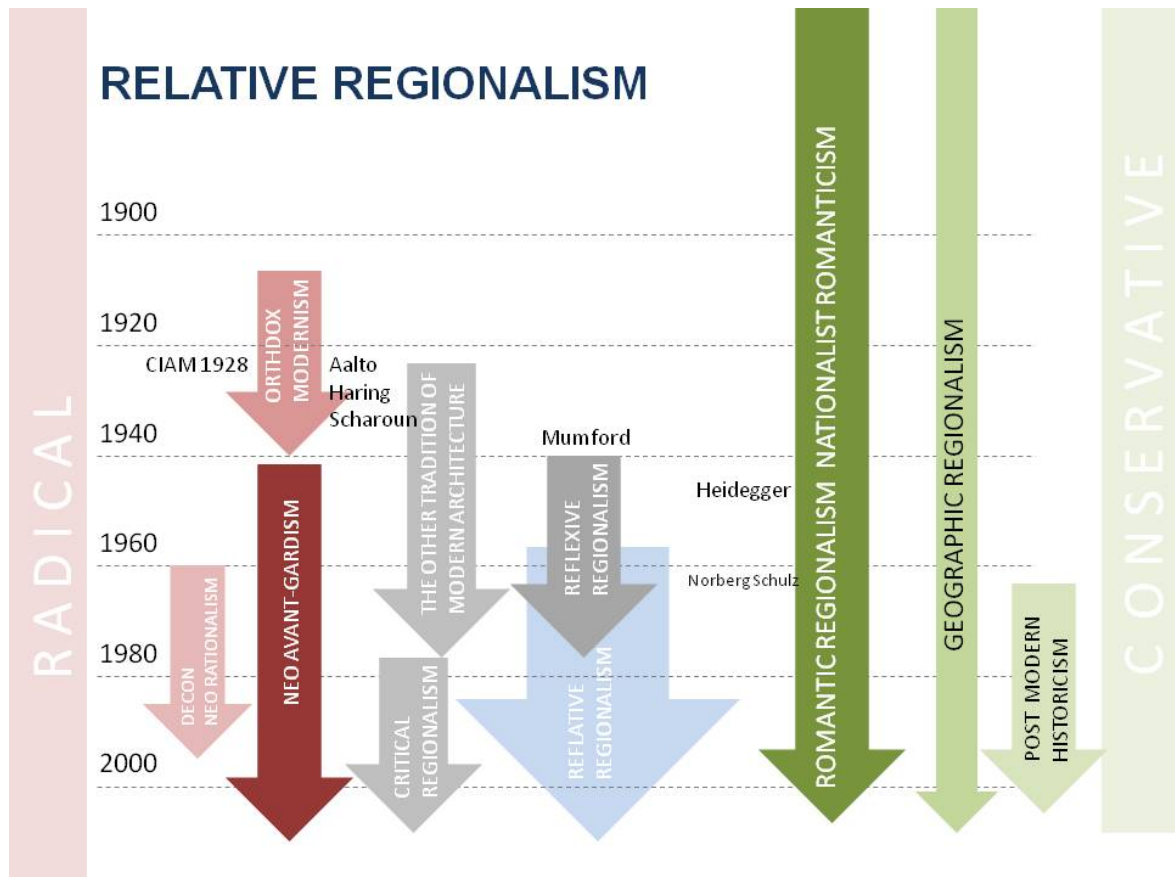


Figure 5.1. Diagram illustrating regionalist approaches in the 20th century, including Fagan's as a Relative regionalism highlighted in blue (Author, 2012).

5.3.1. Conservative (responsive) regionalism

Conservative regional responses resist standardization and the inherent progressive possibilities of new technologies, and are largely influenced by natural analogies. They advocate an architecture of the experiential by concentrating on the immediacy and situatedness of life. Architectural outcomes are either prosaic interactions with place (impossible in most circumstances unless they are completely isolated) or reversions to revivalist and referential approaches where style

¹⁴⁶ It will be argued later (see Chapter 7) that Fagan's regionalist responses mediate these distinct polarities.

¹⁴⁷ It had its roots in the Picturesque movement in England in the early 18th century, which, influenced by Chinese gardens and the naturally-given qualities of a place, represented an anti-universalist, anti-classical approach to design (Lefavre & Tzonis, 2003:13).

dominates. In this form, a condescending regionalism that privileges the quaint and the eccentric is often generated (Canizaro, 2007:36). Jencks (1985:322) quotes Tange who suggests that this

... so-called regionalism is always nothing more than the decorative use of traditional elements. This kind of regionalism is always looking backwards ... The same should be said of tradition. In my thinking tradition can be developed through challenging its own shortcomings and pursuing the meaning of continuum within it.

Pallasmaa (1988; 2007:130) stresses the problematic aspects of a limited and conservative approach:

Without continuity of an authentic tradition even a well-intentioned use of surface elements of regional character is doomed to sentimental scenography, to be a shallow architectural souvenir.

In the 19th and early 20th centuries, Romantic regionalism fostered an anti-universal approach brought on by the problems associated with the processes of industrialization. The resultant Arts and Crafts movement relied heavily on vernacular architectural influences in its attempt to negate machine processes. Politically motivated regionalist nuances were to be seen in the development of nationalistic architecture (such as that of the Nazis) where stylistic elements were used to create a fake regionalism. Later, post-modern historicist architects would take their reaction to standardization to new scenographic heights in their naive search for an architecture of meaning and association.

A less conservative approach was advocated by architects such as Norberg-Schulz who explored Heideggerian concepts of experience. Martin Heidegger's stance was influenced by an anti-machinist viewpoint and an emphasis on cultural identity. This approach was more mediative in nature.

5.3.2. Radical (resistive) regionalism

Radical regionalist responses are politically, socially and ideologically motivated. They are more accepting of the 'machine' and the possibilities of progress through new technologies. They are critical of 'primitive' and sentimental relationships with place and tend to rely on doctrines or canons. It can be argued that the first radical regionalism of the 20th century arose when the project of modernity was in its infancy. Its initial reaction to the facile use of tradition resulted in many architects reassessing tradition and extracting non-aesthetic principles for the development of a new and age-appropriate architecture. Unfortunately their rational inclinations led to an abstraction of traditional influences and through this process severed the link between context,

architecture and the inhabitant. The historian, critic and writer Lewis Mumford¹⁴⁸ (Lefaivre & Tzonis, 2003:6) believes

... that the modern movement in architecture was regionalist at heart, but was high-jacked by the dogmatic International Style approach – the solipsistic and chauvinistic expression of 'authenticity'.

But, as has also been shown in Chapter 4, the Modern Movement was not a homogenous grouping of approaches. Le Corbusier's 'regionalist' leanings and Mediterranean associations combined the new modern language with aspects of place and can thus be said to lie to the right of the radical extreme.

Critical Regionalist approaches operate more politically and ideologically as they attempt to deal with the main paradox facing humanity – how to resolve the conflict of becoming modern and at the same time returning to sources. Eggener (2002; 2007:460) notes that Tzonis and Lefaivre "revisited the topic of critical regionalism in 1991 and defended it as 'a reaction to a global problem ... most urgent in superdeveloped parts of the world and not an expression of identity for so-called 'peripheral' regions'". Critical Regionalism is also political in the sense that it is tied to a post-colonialist debate on the relationships between East and West, nature and culture, and so on.

Frampton (1986:17-24) defines Critical Regionalist responses as a series of oppositions¹⁴⁹, namely space-place, typology-topography, architectonic-scenographic, artificial-natural and visual-tactile. However, the descriptions of these approaches, and the argument developed around them, tend to privilege the anti Post-Modern historicist position. The hierarchical nature of Frampton's oppositions also negates the intentions of his stated polarities, resulting in a formalist approach to the making of architecture. The original intention of Critical Regionalism as a process and not product is thus ultimately negated.

5.3.3. Mediated (reactionary) regionalisms

Most regionalists were realist enough, historicist-minded enough (distinguishing past and present), to know that certain values, behaviours, and practices appropriate to a small-scale, rural, insular, homogeneous, low-technology political economy could not ... find applicability in the qualitatively different and exponentially more complex world of contemporary life. Conversely, regionalists were realistic enough ... to acknowledge that modernity could have its advantages in the realm of living standards and quality of life ... which depended largely on technological advances (electrification, sanitation, medicine) (Canizaro, 2007:24).

– ¹⁴⁸ See Appendix J.

– ¹⁴⁹ These alliterate so well that one struggles to believe their authenticity as strategies of 'resistance'.

Mediated regionalist responses straddle the line between the polarities of machine and nature. They accept *and* resist the extremes of local and global influences, preferring to synthesise the positive aspects of both with a view to allowing the inhabitant to progress technologically but still attain an experiential connection with their surroundings and a concrete association with tradition. Here a mutually beneficial relationship between tradition and modernity is achieved.

What has been rejected by most of the regionalist architects is not Modernism but internationalism. Modernism demands a respect for inherent qualities of building materials, expressiveness for structure, and functional justifications for forms that constitute buildings. These abstract demands do not contradict much, in essence, with anything done by an architect who wishes to adopt a regionalist approach (Ozkan, 1985; 2007:107).

Mediated regionalist responses have developed in three ways: firstly, as a continuation of the romantic regionalist movements such as National Romanticism in the Scandinavian regions; and secondly, through counter trends to universalisation and standardization of space and form that resulted during the height of orthodox modernism. Colin St. John Wilson (2007:28) notes that architects such as Hugo Haring had formed 'another tradition of modern architecture' after the CIAM meeting in 1928. This was a response that reconnected with tradition and place in a more tangible manner than the abstracted approach of pastoral modernity. Although, according to Curtis (1996:29), Aalto pleaded that nature should dictate architectural form rather than the machine, Aalto did not negate modernization. His architecture mediates between man and technology to support social and cultural integration (Pallasmaa, 1998; 2007:133), creating a synthesis between Internationalism and National Romanticism.

Thirdly, a modern-regionalism arose in countries (such as the Americas and more importantly for this study, South Africa) removed from the mainstream effects of the orthodox Modern Movement. Lewis Mumford, a North American, was the first person to articulate a position on regionalism that was critical of both universalism and revivalism. Lefaivre and Tzonis (2003) have based much of their development of the tenets of Critical Regionalism on his writings. Mumford had initially advocated a regionalist architecture in opposition to the Beaux-Arts tradition that he referred to as 'icing on a birthday cake' (Lefaivre & Tzonis, 2003:19). But later articles brought together the main polarities of the regionalist debate, the local and the global. Regional architecture was for Mumford neither a return to a romantic regionalism, nor was it in opposition to the universal. He saw dogma in the structures of society, and not in science or technology, as the problem with the Modern Movement (Lefaivre & Tzonis, 2003:19). He proposed a regionalist response that accepted, but was also critical of, both the universal and the traditional. As will be argued later, Fagan's approach to issues of regionalism bears a close relationship with that of Mumford, not only due to their similar attitudes but also to the fact that their philosophies were formed as reactions to an already mediated and removed Modern Movement and occurred at similar times.

5.4. The mediative regionalist approach

Regionalism has been defined as a reactionary 'process' that mediates a series of dialectical oppositions. The 'process' can be described as consisting of the polarities to be mediated, the method of mediation and the resultant outcome. Canizaro (2007:21-22) identifies that regionalist approaches to architecture are inconsistent and suffused with inherent tensions, but that three oppositional themes tend to form the core of a regional reaction. These are tradition and modernity, imitation and invention, and resistance and response. But these are not merely themes. They are the constituents of a reactionary process. The highlighted themes will now be transcribed to explain the process of a regional mediation that acts in a reactionary manner.

5.4.1. The dialectical opposition: tradition and modernity

At the core of a reactionary regional dialectic is the struggle between cultural continuity and the need for progress. Architecture is seen to be progressive as it seeks to give form to contemporary ways of living and new spatial ideas. On the other hand, an architecture of continuity seeks the maintenance of the old (Curtis, 1996:303) or, as Heynen (1999a:16) explains, "a traditional framework of reference" which gives certainty and meaning.

5.4.2. The mediative processes: resistance and response

Resistant responses against centralising and generalising forces that seek to negate tradition can range from the representational to the political, but in all cases they seek to maintain personal or local identity through recognisable form. On the one hand, a normative regionalist response assumes social, economic and political relations to be stable. Under such circumstances the architecture would respond to local climatic, topographical and material conditions in a representational manner.

5.4.3. The mediative outcome: imitation and invention

Normative and resistant regionalist responses result in imitative and inventive architectures respectively. This echoes the understanding developed in the previous chapter on the vernacular in which conservative and interpretative strategies were outlined. The imitative regionalist approach seeks to retain cultural continuity through recognition, while the inventive approach seeks evocation through experience and interpretation, the latter being a more subtle approach. True regionalisms will mediate these dialectics in line with Harris's statement (1958; 2997:80) that "a region promotes ideas. A region accepts ideas. Imagination and intelligence are needed for both."

5.5. Regionalism in South Africa

Chapter 4 has briefly touched on some regional architectural responses (as reactions to universalizing tendencies) prior to and after the advent of the Modern Movement in South Africa. This section will highlight regionalist responses in South Africa with a view to locating Fagan's position within this milieu.

5.5.1. Conservative regional responses

Early Colonial influences in South Africa were described in Chapter 3 as a series of developing vernaculars. If regionalism is defined in this thesis as a reaction to universalizing tendencies, inherited colonialist architectures cannot be described as regionalist. The closest approach to regionalism was that of the English occupation in the early 1800s which superseded Dutch and Portuguese influences. But as Lewcock (1963:IX) suggests, colonial architecture generally reflects a conglomeration of influences so that "one cannot confidently pronounce a fine building as belonging to either a Cape or a British tradition, but must declare it the product of a new, 'South African' culture".

Although Herbert Baker's Arts and Crafts manipulations of the Cape Dutch tradition are closer to a regional architecture through its conscious response to the making of place, and was a reaction to the "eclectic, often vulgar, but always vigorous architecture of High Victorianism" (Herbert, 1975:1), the response was, in the main, the product of a European tradition. Baker did however respond to climatic conditions by introducing "cool loggias and open courts" (Pearse, 1960:18) in his planning. Similarly, the architecture of De Zwaan¹⁵⁰ (1867-1948), who modified existing pyramid type forms to suit local circumstances, could be seen as a limited attempt to manipulate inherited and standardized Victorian forms. His marked the beginnings of an architecture that was responsive to climate and materials, a movement which gained impetus after the demise of the mediated Modern Movement in the 1930s.

The first real regionalist reaction was that of the architect Moerdijk, who resisted Imperialist tendencies by arguing for an "Afrikaner (African) architecture" (Fisher, 1998:124). Moerdijk was supported by artists such as Pierneef and Van Wouw and writers such as Preller. The climax of this architectural reaction was the Art Deco inspired Voortrekker Monument of 1938.

5.5.2. Radical regional reactions

The radical regionalism of the Transvaal Group in the 1930s attempted to dispel the "eclectic,

— ¹⁵⁰ See Appendix J.

reiterative and tired" (Herbert, 1975:1) neo-Renaissance (Cooke, 1960:21) inspired architecture of the period through the importation of a Corbusian and Bauhaus motivated Modern Movement. Tzonis (2007:216) explains:

There are important precedents in the creation of a regionalistic architecture in South Africa. I do not refer to the picturesque 'Cape Dutch' houses, intruding African or the whitewashed thatched vernacular that followed it, but rather to the earlier efforts to create a modern architecture, which as much as it was 'western internationalist', also demonstrated serious efforts to design within the framework of the region, as the concept 'region' was defined at that moment

Through Martienssen's editorship of the SAAR and the 1933 publication of *zero hour* (sic), new ways of living and the advantages of new technologies were disseminated. But it was to be a short-lived period, as the emphasis soon shifted from Johannesburg to Pretoria.

5.5.3. Mediative regional responses

A strong mediative regionalism arose in the Pretoria region as a reaction to the failures of the architecture of the Transvaal Group. The development of this architecture was, in large part, a reaction to the 'coldness' of cubist domestic architecture proposed by Martienssen and his followers, but also continued the trend of earlier regional works that reflected the exigencies of climate and available materials. A true mediation had occurred, one which synthesised modern living requirements, flexible planning, modern technologies, and economies of space and materials brought on by war shortages and a limited economy with the need for a truly 'South African' architecture that responded to its climate and setting. McTeague suggests (1983:47) that the work of Norman Eaton is an exemplary example of a South African regionalism through its synthesis of the planar nature of the International Style, the physical influences of site and the "heritage of Cape Dutch houses".

5.6. Summary

Regionalism has been defined as a conscious architectural choice that reacts to universal and revivalist standardizing tendencies. It has been argued, in a Mumfordian sense, that mediative approaches seek to resist *and* accept standardizing tendencies to form a regionalism that straddles the boundaries of tradition and modernity in both imitative and inventive ways. The legacy of a strong mediative regionalism in Pretoria formed the basis of Fagan's architectural approach. The third part of Chapter 7 will outline how Fagan has responded in his own way to the regional shifts taking place in the then Transvaal during his tenure there, his regional-modern architectural education, the work that he did in small towns through his association with Volkskas Bank and his later conservation work. All of these influences led to the development of a *relative* regionalism.

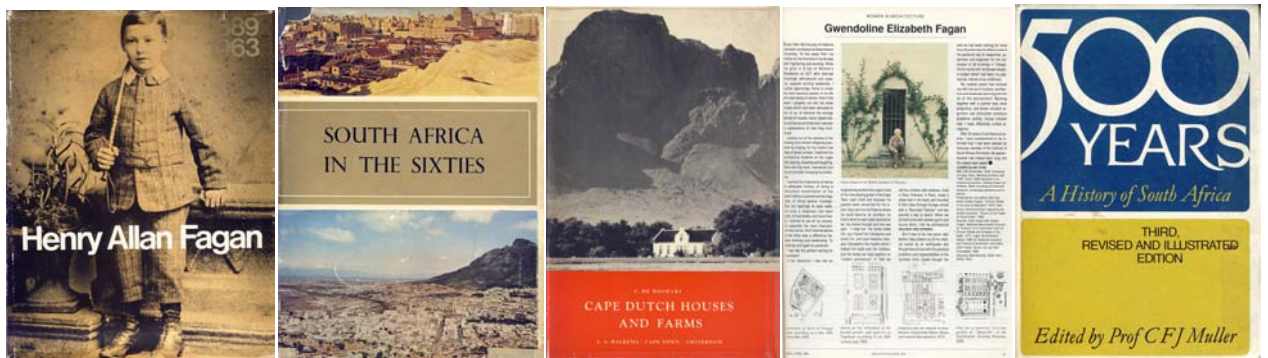
SECTION C

CRYSTALLIZATION

This section describes how a series of initiations have affected Fagan's philosophical and architectural outlook. The section acts as a mediation between context and expression.

Chapter 6

INITIATIONS - THE MAN AS MEDIATOR



Henry Allan Fagan cover (Fagan, Q., 1975). South Africa in the sixties, a socio-economic survey cover (Andrews, 1965). Cape Dutch houses and farms cover (De Bosdari, 1971). Gwendoline Elizabeth Fagan (Architecture South Africa, March/April, 1993). 500 years - A history of South Africa cover (Muller, 1984).

This chapter briefly describes Gabriël Fagan's life and influences through the veil of a series of initiations and mediations:

Fagan's childhood will be described as a first initiation resulting in a mediation between nature and nurture and hand and mind.

Fagan's tertiary education will be described as a mediation between science and the arts as it alternates between musical creativity, mechanical invention and part-time education.

Fagan's first work experience will be outlined as a mediation between corporate expression and regional inflections, and family life and business.

Fagan's experiences with conservation in relation to new designs will be highlighted.

6.1. First initiation (1925-1942): formative influences

But of course we are aware that to understand the architect we must understand the man (Herbert, 1975:2).

6.1.1 Nurture and nature

Fagan once remarked that a child can only fully develop if hand and mind are taught to work in synergy (Fagan, 1983b:2). His upbringing was clearly formed along these lines but a healthy dose of intelligence, creative genes and a privileged upbringing created a solid platform for these traits to develop to their full potential. He grew up in a well-respected family that encouraged artistic pursuits such as drama and writing. He was also influenced by his father's creative abilities and so, from a very early age, began to take mechanical objects apart and invent new ways of making.

Gabriël Theron Fagan was born in the family home Waveren¹⁵¹ (see Fig. 6.1) in Avenue Road, Newlands, Cape Town on the 15th of November 1925 to Henry Allan Fagan (1889-1963) and Jessie (Queenie)¹⁵² Theron (1896-1977)¹⁵³.

My own second name Theron refers to French Huguenot ancestry and my great-great grandfather was an Irish immigrant from County Cork (Fagan, 1991a:1).



Figure 6.1. Fagan's childhood home as it existed in 2009 in Avenue Road, Newlands, Cape Town (Author, 2009).

Fagan's father was born in Tulbagh, a little town about one hundred kilometres north-east of Cape Town. He was one of eight children, two of whom died when they were around five years old. Fagan's grandfather, Henry Allan (1865-1931) (see Fig. 6.2), ran the general store in the town which had been, in turn, established and owned by his father, also H.A. Fagan (1837-1891) (see Fig. 6.2).

¹⁵¹ Waveren was the original name given to Tulbagh before it was named after a Dutch governor of the time, Ryk Tulbagh.

¹⁵² There is some confusion in the spelling of this nickname. At times it ends with a 'y' and at others with an 'ie'. For clarity 'ie' shall be used as it seems to occur more often in the published book on Fagan senior.

¹⁵³ See Appendix B for family tree.

Fagan's father was just ten years old when the family moved from Tulbagh to the Strand in Cape Town, where he became mayor and ran a law agency. The family later moved to Somerset West where a large house and garden with tennis court, fruit orchard and cement dam provided much pleasure for the children (Fagan, Q., 1975:25). In 1922, Fagan's father returned to his birthplace.

Ek het darem vir een besondere doel na Tulbagh terug gegaan: om, soos Jakob van ouds, in die land van my herkoms vir my 'n bruid te gaan haal (Fagan, Q., 1975:50).

[I went back to Tulbagh for one specific reason: as Jacob of old, to fetch a bride in the land of my birth].



Figure 6.2. Left: Gravestone of Fagan's paternal grandparents in the cemetery of the Dutch Reformed Church in Tulbagh (Author, 2009). Right: Gravestone of Fagan's paternal great grandfather in the same cemetery in Tulbagh (Author, 2009).

Fagan's father married Jessie (Queenie) Theron on the 3rd of June 1922 (see Fig. 6.3). Jessie was one of four daughters born to Gabriël Theron (1853-1925) and Jessie Bennett (1885-1945). The family lived in Tulbagh and it seems that Fagan's mother's nickname originated due to her rather diminutive frame and ladylike appearance. Dr. D.F. Malan¹⁵⁴(1874-1959) sent a telegram to Fagan's father on the eve of their wedding indicating that he needed to be careful that the Queen did not rule over him! (Fagan, Q., 1975:50).

— ¹⁵⁴ See Appendix J.



Figure 6.3. **Top left:** Fagan's parents in the garden of their Newlands Home. (Fagan, Q., 1975: 51). **Top right:** Hennie and Gawie Fagan c.1932 (Fagan archive, undated). **Bottom left:** Hannes and Gawie Fagan in the Gardens in Cape Town c.1935 (Fagan archive, undated). **Bottom right.** Fagan and his white rabbit in the garden of their Newlands home. c.1935 (Fagan archive, undated).

Three children were born from the marriage. The first was the sporty Henry Allan (1923-2004) (see Fig. 6.3) who trained as an engineer at the University of Cape Town. He practiced in Angola until he had to hastily retreat during the bush war of the 1970s. He arrived back in Cape Town destitute and started farming in the Bottelary area till his death from stomach cancer in 2004 (Fagan, J.J., 2009). Gabriël (Gawie) Theron Fagan (see Fig. 6.3) was born in 1925 and his younger brother Johannes (Hannes) Jacobus (1927-) followed soon after (see Fig. 6.3) Hannes qualified as a lawyer and became a judge like his father, ultimately achieving notoriety as an inspecting judge of prisons in South Africa from 2000-2006. Today he is retired and lives in the city bowl of Cape Town in a grand Victorian house altered by Fagan. The two remaining brothers are very close and see each other regularly for dinner and long and involved conversations (Fagan, J.J., 2009).

Fagan's father had an illustrious academic, professional and political career. He trained as a lawyer at the University of Stellenbosch (1905-1909) and at the Middle Temple University in London from 1910 to 1914, where he received his LL.B. degree. Thereafter he successfully wrote both the English and South African bar exams (Fagan, Q., 1975:36).

I recall my father telling how he as a student at the Middle Temple in London, was requested by his uncle Jan Smith (later of the Groot Woerdeboek) who was at the time studying philosophy in London, to write poetry or prose in Afrikaans for publication in South Africa (Fagan, 1991:6).

Fagan's father set up practice in Cape Town, but the war years intervened and he became the secretary of *Die Burger* newspaper committee in 1915 and later a member of the board of directors and assistant editor to Dr. D.F. Malan. Around 1917 he met C.J. Langenhoven¹⁵⁵ (1873-1932) who became a lifelong family friend. At *Die Burger* Fagan senior honed his journalistic and writing skills, an asset he clearly passed on to his son who displays meticulousness with written texts. His daughter Helena remarks:

... and bad spelling!! One of his pet hates. He even marks mistakes in the newspaper and gets all worked [up] when he finds 'a bad one'. On the subject of language – he is extremely set on writing and speaking a good pure Afrikaans and protecting its rightful place in our throwaway culture. He has a deep inherited love for the language and takes much care with the choice of words (Fagan, H.E., 2009)

This fervour is reinforced by the reworking of lectures that have been discovered in Fagan's archives (see Fig. 6.4). Layers and layers of rewritten text testify to his thoroughness to find the exact wording. This drive for perfection can also be seen in design sketches where ideas are explored over and over again. He was, according to his children (personal communications), a very strict man.

He would expect the same standards from us as he did from himself. Nothing less than perfect was good enough and you don't stop till it is (Fagan, H.E., 2009).

– ¹⁵⁵ See Appendix J.

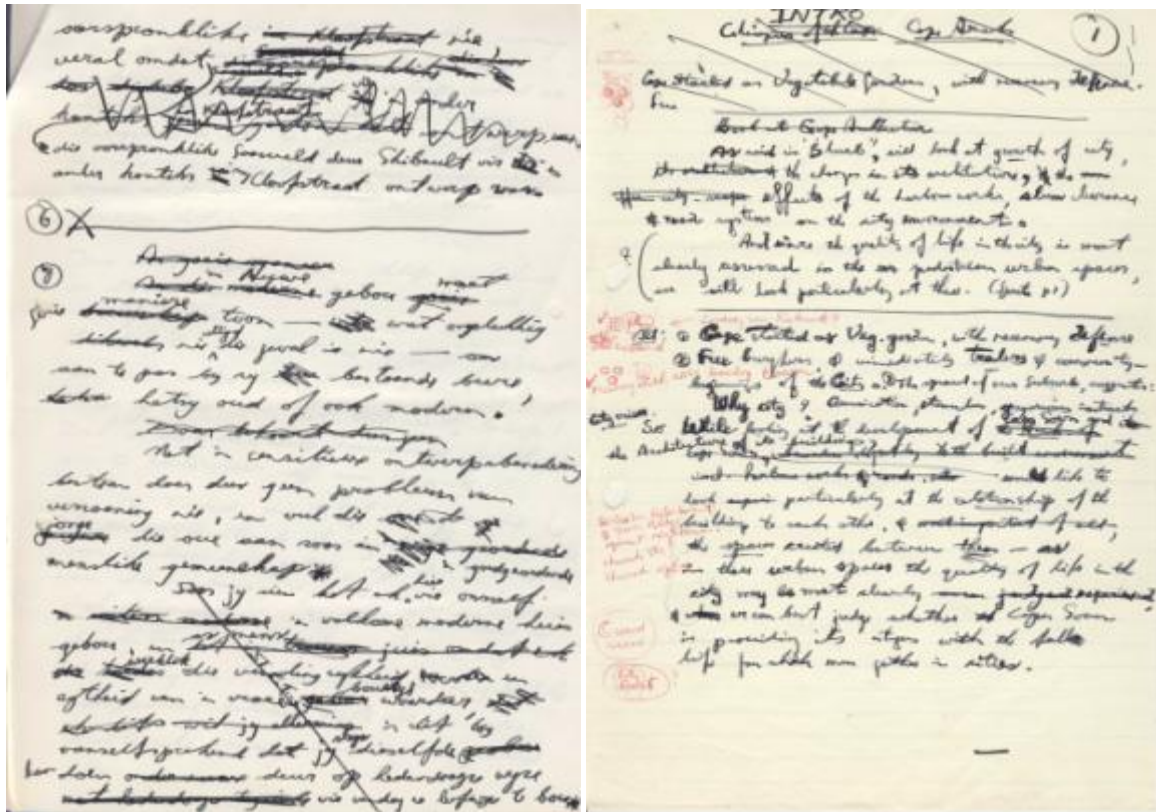


Figure 6.4 . Fagan's reworked lecture notes: SABC, 11 Dec 1975:6 and Glimpses of the Cape 20 April 1977:14 (All Fagan archive).

Fagan's father's career took another turn when he became the first professor in Roman Dutch law at the newly established law faculty of the University of Stellenbosch. His political¹⁵⁶ career began in 1933, when he became a member of the Swellendam House of Assembly for the National Party coalition. He was later a successful candidate for the Stellenbosch region after turning down an appointment as judge. In 1938 he became minister for Native Affairs in the United Party¹⁵⁷ cabinet of General Barry Herzog¹⁵⁸ (1866-1942). Not long thereafter the Second World War broke out and the coalition broke up. Along with Herzog, Fagan's father moved to the opposition benches but in 1943 he was appointed by the Smuts government as judge in the Cape region.

He was an eminent member of South Africa's judiciary appointed by General Smuts to chair a commission of inquiry whose report predicted mass urbanization, with a migration of blacks to the cities. This vision, then politically unpalatable, was contradicted by a later commission (Anon, 1991:15).

— ¹⁵⁶ Fagan indicates that his father was unwillingly drawn into politics and that Queenie tried to stop him (Fagan, 2008b).

— ¹⁵⁷ The United Party was South Africa's ruling political party between 1934 and 1948. It was formed by a merger of most of Prime Minister General Barry Hertzog's National Party with the rival South African Party of Jan Smuts, plus the remnants of the Unionist Party. Its full name was the United National South African Party, but it was generally called the "United Party". The party drew support from several different parts of South African society, including English-speakers, Afrikaners and 'Coloureds'.

— ¹⁵⁸ See Appendix J.

In 1950 Fagan's father became Appeal Judge, and in 1957 the 11th Chief Justice of South Africa until his retirement in 1959.

6.1.2 Hand and mind: the experiential and the didactic

Fagan's father's professional career was balanced with other pursuits such as translation, writing poetry and music. Fagan remembers that in the evenings, for relaxation, his father used to play Beethoven on the baby grand piano (given to his father by his grandfather as a wedding present), accompanied by his wife who was a very good singer. The timber floored house in Newlands allowed Fagan to fall asleep to the playing and singing (Fagan, 2008b).

For years I slept on the balcony of my parents' bedroom, later shared an upstairs bedroom with Hannes, and finally had my own room above the garage (Fagan, 2010b).

Although there was a piano in the Newlands house (Fagan, J.J., 2009), of the three brothers

... Gawie was the only musical one, so he was sent to take piano lessons with Elsie Hall's sister, a Mrs Hughes (1877-1976) ... but classical music did not interest him. Playing on his own held no excitement, and he was more and more attracted to jazz music where the live interaction with fellow musicians as well as the creative process of improvising your own solos appealed much more to him (Fagan, H.E., 2005:5).

Fagan was more interested in the guitar and played for hours with a friend, Jimmy Rogers, who lived up the road. Fagan recalls that as a child he made a tin guitar with one or two strings. He notes (c.1975:14) that he and his wife Gwen both grew up in musical homes and that his four children all inherited this gift. But Fagan's creative streak made him more interested in jazz music, a passion he pursues to this day. The reception space in his Cape Town office still houses a piano. The author was once witness to an impromptu jazz performance by Fagan, rather rudely interrupted by the dog needing some attention. "May I not play?" was Fagan's Afrikaans response. Fagan rarely plays for anyone but himself these days and I wonder if he wanted to show off his dexterity and skill. He knew I was there.

Fagan's love of jazz epitomises his approach to architecture. Firstly, the inherent structure of music is recognized but the strong foundation allows for a freedom of expression. Secondly, jazz was

... born of a regional expression. Its invention is inconceivable outside the particular milieu of New Orleans from which it sprang. Jazz is a musical form based strongly in tradition (Speck, 1987; 2007:72).

Thirdly, its compositions are born of an intuitivity and immediacy that is difficult to achieve with other more cerebral (perhaps classic) music forms. This supports Fagan's claim that he regards

himself as a designer that is 70% intuitive and 30% rational (Fagan, 2008b)¹⁵⁹.

Fagan's father was also an inventive man, at one stage recognizing the inconvenience of opening and closing farm gates. He developed a full-scale prototype of a gate (built by a Mr. Ludwig in Cape Town) that would be mechanically opened and closed by the car as it drove over a set of metal plates. Unfortunately the cattle grid was developed at the same time, which immediately put pay to this ingenious invention. Fagan recalls that his father did not really make things himself but did fix things (out of necessity) around the house (Fagan, 2008b). Fagan's son Henry (2009) recalls that his grandfather also designed an alternative to the qwerty keyboard for typewriters and developed his own shorthand system (Fagan, H. 2009).

The Fagan children grew up after the South African Depression but they were still raised with a sense of frugality. Fagan's wife (2008b) recalls that no food would ever go to waste and that Fagan's father refused to throw away old bananas. Fagan's brother Hannes remembers (2009) that Fagan's 'free trip' on a local bus resulted in him being dragged by Fagan senior to the bus station to pay the outstanding debt. The children also received a great deal of mental and intellectual stimulation outside the formal educational environment. Hannes Fagan (2009) recalls that many a heated argument at the dinner table was settled through two sets of encyclopaedias that the family possessed. But exposure to making things did not rely on merely doing but rather on creatively investigating possibilities. Access to materials and machinery were instrumental in fostering these explorations. A relationship with nearby neighbours, the patriarch's lead and the availability of tools seemed to have fostered a love of making things, with Fagan being the most inventive of the brothers. Fagan's most daring invention was a diving helmet constructed from an old tin with the top removed and a Ford hubcap soldered on. Melted lead was used to fix glass panels in place, and was also applied to the base of the tin to keep it upright. A car pump and hose supplied air. Hannes became the guinea pig when the boys tried out the helmet in Kalk Bay harbour (Fagan J.J., 2009 and Fagan, 2008b).

Fagan does not recall that his father and he made things together, probably as his father's work took him away from the family home very often, something that he found hard to bear.

Ek het in die trein baie gelees, in die twee boeke oor Salazar en in 'A Hindu way of life'. Een sinnetjie het my veral getref op 'n oomblik toe my werk my so ver van my familie af wegneem. Dit is 'Man's real happiness lies not in mere happiness itself but in the happy acceptance of his duty'. Op hierdie tydstip vind ek dit makliker gesê as gedaan" (Fagan, Q., 1975:50).

[I used to read a lot in the train, in the two books on Salazar and in 'A Hindu Way of Life'. One sentence struck me in a moment when work had taken me so far away from my family. This is 'Man's real happiness lies not in mere happiness itself but in the

– ¹⁵⁹ Fagan later explained this statement in more detail - see Chapter 8.4.

happy acceptance of his duty'. At this time I find it easier to say than do.]

Fagan's mother Queenie brought a sensitive touch to his upbringing. He was the favourite son, by all accounts, and took after his mother more than the other brothers, if not in looks then certainly in physical stature. Fagan disagrees, however:

No, I tended to see Hannes as spoilt by our mother, whom he was not above charming with little gifts like chocolates (Fagan, 2010b).

Jessie was an accomplished singer, actress and gardener. She organized and took part in many a play in a shed the Fagans built in their garden. The family was surrounded by creative people (Fagan, 2008a) and this must have rubbed off on Fagan as a child. His mother encouraged artistic pursuits with all her children and provided them with moulding clay and a blackboard-painted wall in their playroom (Fagan, 2008b). Here the children could express themselves.

I had a sketchbook, and my mother had a wall painted for us to draw on with chalk. I did not draw buildings on paper, but built a covered tree shelter where I could read undisturbed, and an earth covered shelter about which my mother was less charmed as it was dug in the middle of her rose garden (Fagan, 2010b).

Fagan attended Simon van der Stel Primary School¹⁶⁰ in Wynberg (a suburb of Cape Town) and Jan Van Riebeeck High¹⁶¹ in the city bowl. He did not have to work hard to be at the top of his class in primary school. In high school (see Fig. 6.5) he enjoyed Latin and English (as he had a good teacher) but did not put much effort into his schoolwork. More attention was paid to creative pursuits outside of the school environment (Fagan, 2008b).



Figure 6.5. Fagan's matric class of 1942. Fagan is at the top right. (Photo courtesy of Jan van Riebeeck High School, 2009).

Fagan's final high school year marks are rather average, with language subjects the highest and mathematics the lowest (see Fig. 6.6). This demonstrates the affinity Fagan has for languages and the difficulties he had with the engineering course he later attempted to complete at the University

— ¹⁶⁰ The school was established in 1930 with many learners whose parents were in the nearby military base.

— ¹⁶¹ The school was established in 1926.

of Cape Town. His position in class varies from 13th to 24th. This supports the notion that he made a limited effort academically. The most interesting part of the results page is the teacher's comment that Fagan should improve his learning work and shift his interests (presumably away from his hobbies) to his school work.

Geskiedenis	Aand.	Leit.	Kuns	Musiek	Totaal	Persentasie	Posisie
78					418	69.7	21
173					1259	66.3	13
175					1179	62.1	24

	Afrikaans	Engels	Duits	Latyn	Malies	Sinnat.
A Fagan, Gabriel Theron	55	71		76	69	69
	228	206		232	194	226
kan eerswerk later doen - skrif leef/hobby's?	240	211		225	130	198

Figure 6.6. Fagan's final year high school results (Photo courtesy of Jan van Riebeeck High School, 2009).

Fagan was not a great sportsman although he did take part in athletics. He often cycled from his Newlands home to school in Cape Town which, together with all of the other outdoor pursuits, was regarded by Fagan as enough exercise. Fagan's developmental influences were contextualized through a love of sailing that allowed him to understand the elements and their effect on human beings and architecture. All of these influences were instrumental in allowing Fagan to understand both the static and dynamic aspects of context.

Born in the shadow of Table Mountain, a stone's throw from here, some of my earliest recollections are literally of this wonderful earth – because I enjoyed nothing more than shaping the soil in our large garden, and modelling in mud, or by adding some branches, building little shelters. For me, these basic elements, earth and water, have always retained their mystery, and I pity the pink-eyed products of today's sophisticated computer games who are nevertheless deprived of the basic lessons and skills to be learned from creative handwork: for the child can only develop fully if hand and mind explore together (Fagan, 1983b:1).

This is reminiscent of Barragan's reflections on his youth, echoing Fagan's subscription to a synthesis of context and universality:

My earliest childhood memories are related to a ranch my family owned near the village of Mazamitla. It was a pueblo with hills, formed by houses with tile roofs and immense eaves to shield passersby from the heavy rains which fall in that area. Even the earth's colour was interesting because it was red earth. In this village, the water

distribution system consisted of great gutted logs, in the form of troughs, which ran on a support structure of tree forks, 5 meters high, above the roofs. This aqueduct crossed over the town, reaching the patios, where there were great stone fountains to receive the water. The patios housed with stables, with cows and chickens, all together. Outside, in the street, there were iron rings to tie the horses. The channelled logs, covered with moss, dripped water all over town, of course. It gave this village the ambience of a fairy tale. No, there are no photographs. I have only its memory (Frampton, 1983a:152).

The domestic setting of Waveren, Fagan's Newlands family home, with its tennis court, gardens on a slope and the nearness of the then uncanalized Liesbeeck River at the bottom of Avenue Road, fostered a love of nature's elements to which Fagan's buildings still respond to this day. Fagan recalls that he and his brothers dug holes and tunnels in their garden and that tree houses were built in the trees of the surrounding streets, much to the horror of the parents who worried that their children might be buried alive or fall to their deaths. Fagan notes (c. 1975:14) that he also built tree houses and through this experience learnt the value of protection from the elements. He also noted that someone who bought his house with money rather than labour was poorer for the experience (or lack of it).

Fagan made his first boat when was about ten years old, and recalls that by the time he had completed construction (a year later) he had outgrown it but that it did not matter as the building process was its most satisfying aspect. He and his brothers sailed this boat with its makeshift sail of iron marked sheets at Zeekoevlei (see Fig. 6.7). Fagan recalls that a neighbour, dr. Petronella van Heerden, felt sorry for him and donated an eighteen foot dinghy which he sailed at Zeekoevlei and eventually in Hout Bay.

My first boat, a homemade tin canoe, was also launched here on the Liesbeeck, where it flowed as a clear mountain stream under Thibault's Watervoort Bridge past the brewery and Newlands Mill. I soon graduated to Zeekoevlei, and my fascination with sailing ever since has been in the basic, yet infinitely complex interaction of wind, water and weather, with always the romance of the protective vessel contrived through man's ingenuity to harness these forces, while providing him with shelter in an alien environment (Fagan, 1983b:2).

The love of boating must have been instigated by Fagan senior (although Fagan recalls that his father did not really have an interest in sailing). A photograph (see Fig. 6.7) of Fagan at about eight years old at Bloubergstrand depicts the family on an outing, with his father assembling a boat with Hannes and Henry seemingly more involved! (see Fig. 6.7) Fagan recalls (c. 1975:2) that a neighbour, Fred Smithers, had taught him to sail on the yachts Stella and Viking, and that he eventually sold his yacht Westwind to Fagan for R10 000. This yacht would be renamed Suidoos and would eventually win the Cape to Uruguay race in 1982¹⁶².

– ¹⁶² See Chapter 6.5.1.



Figure 6.7. Left: The three Fagan brothers on the Liesbeeck river with their tin boat. Johannes is on the left and Henry on the right. c. 1933 (Fagan archive, undated). **Right:** Fagan and family at Bloubergstrand, c.1931. Fagan is on the left in earnest conversation with his mother (Fagan archive, undated).

Fagan is unsure of how Cape based architecture became an important inspiration in his architectural life. He notes that the family did not go on any specific visits that would have exposed them to Cape architecture, but that his parents did take them on drives to Stellenbosch and Swellendam (Fagan, 2008b). A photograph (see Fig. 18 right) of Fagan and his younger brother in Cape Town Gardens suggests that the children were taken to places of historical interest.

Fagan notes (2010b) that he and his brothers' trips to his uncle's sheep farm in Hopetown (Fagan J.J., 2009) over the winter school holidays probably fostered an interest in vernacular buildings and their contextual appropriateness.

An uncle on my mother's side, Pieter Theron, was member of parliament (sic) for the Hopetown area (close to the Orange River, south of Kimberley) and stayed with us in Newlands every year during the session. Every year we three boys would then spend our June holiday month on his farm – go by steam train to Witput station (the stop before Hopetown) and get fetched by horse cart for the twelve miles to the farm.

Fagan also indicates that he has always had a love for the Karoo and its vernacular buildings (Fagan, 2011a). He was, however, certainly aware of the traditions of the Cape.

One of my most enduring childhood memories are attending a Bo-Kaap wedding or mysterious khalifa with my parents and that great champion of the Cape Muslims, I D du Plessis (Fagan, 1992a:5).

6.2. Second initiation (1943-1951): Tertiary education – Engineering and Architecture

Fagan's activities in the period from 1943 to 1946 alternated between musical creativity, mechanical invention and a 'part-time' education in engineering.

6.2.1. University of Cape Town

The next few years were spent quite literally making music for my first sports car, and meeting the maidens; as these included my future wife. I have never had cause for regret but it did contribute to my dropping half way out¹⁶³ of the civil engineering course to study architecture, as my mother had always suggested I do (Fagan, 1983b:2).

After Fagan completed his high school education in 1942, he enrolled in a mechanical engineering course at the University of Cape Town (UCT). In those days, there were no prior applications or interviews. Fagan's older brother Hennie took him to registration day and as Fagan was unsure what to study he ended up standing in a queue with his brother. The intimidation of Dean Duncan 'Drunken' Mc Millan resulted in Fagan signing up for an engineering course (Fagan, 2012), but the course did not hold his attention and the fact that he did not do his homework (Fagan, 2010b). He did however have an affinity for geology and applied mathematics. Fagan (2010b) recalls the subjects he had to study:

I can't remember clearly, but think we had geology, pure maths, applied maths, engineering drawing, theory of structures and mechanical engineering which was taught by Prof Duncan (Drunken) Mc Millan, a Scott. The only thing I remember from his classes was his story of two bursary applicants who appeared before him. In taking notes, he purposely broke his pencil, took out his knife and re-sharpened it while the student looked on. He did the same with student number two, who immediately took out his own pocket knife and said "May I, sir?" So Prof asked "And who got the burrrrsary? An engineer must be a prrrrrractical man." So I at least learned something at Varsity, and to this day will never venture anywhere without my pocket knife.

During the four years at the University of Cape Town, Fagan developed his technological pursuits and musical hobbies, but also met his future wife.

6.2.2. Gwen Gannon¹⁶⁴ – wife, mother and business partner

Gwen Gannon was born on 25 September 1924 in Victoria West to an Irish father (see Fig. 6.8), Benjamin Charles Gannon and an Afrikaans mother, Helena (Nauti) Johanna Elisabeth Basson.

– ¹⁶³ Fagan, in fact, remained in the course for 4 years, from 1943 to 1946.

– ¹⁶⁴ See detailed curriculum vitae in Appendix A.

After her father disappeared in 1926¹⁶⁵ while they were living in Durban, she and her mother went to live with friends in Irene in Pretoria. Not long thereafter, on her uncle's insistence, her mother moved to Stellenbosch to teach music while Gwen was forced to stay with her uncle in Moorreesburg (Fagan, 1999:14). At the age of seven she finally went to live with her singer-teacher mother in Stellenbosch (Fagan, 1999:70), attending Rhenish Girls' High School. After school she started her medical training at the University of Stellenbosch, and one year later switched to the University of Cape Town where she completed her MBChB degree in 1948.

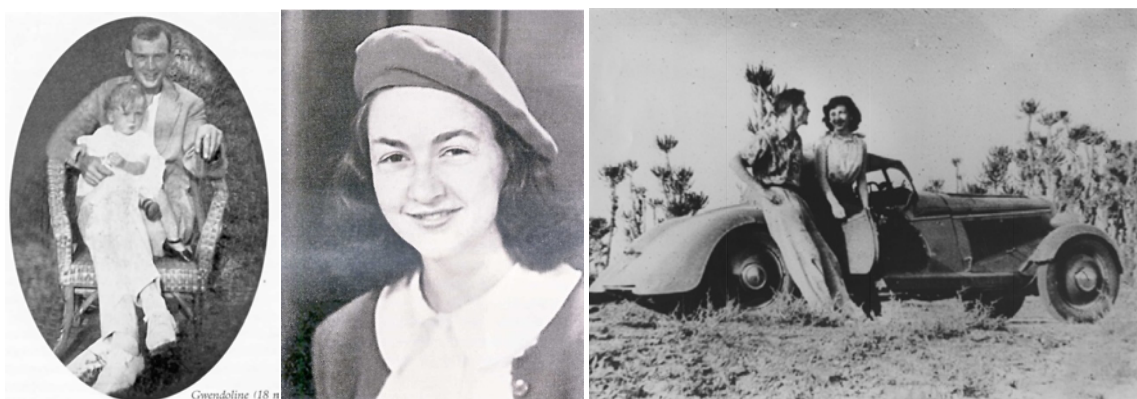


Figure 6.8. **Left:** Gwen at 18 months old with her father (Fagan, G.E. 1999: 9). **Middle:** Gwen in her twenties (Fagan, G.E. 1999: 182). **Right:** Fagan and his wife among the euphorbias in the Eastern Cape next to Fagan's Adler sports c.1944. (Fagan, archive, undated).

In 1944, Fagan met Gwen Gannon while she was studying medicine at UCT. They were both in their second year of study. Gwen recalls (Fagan, 2011a) that she first encountered Fagan at the women's residence where a group of friends met to play a game called 'Beetle Drive'. Fagan's friends evidently teased him about his mother's insistence that he court Suzanne Krige, but Fagan was not particularly interested. Suzanne eventually married another prominent and now deceased Cape Town architect, Revel Fox. Gwen notes that the connection between her and Fagan came a little later when Fagan drove past her when she was returning to the medical residence after singing lessons in Mowbray. They chatted and thereafter Fagan would rev his motorbike under her window and often take her out on drives (see Fig. 6.8). Gwen notes that she had just lost her mother and that the connection with Fagan was 'nice to have'. The relationship cemented itself when Gwen was invited by a residence friend to her parents' house in Onrus. There Gwen discovered Fagan camping in a little tent eating only condensed milk! She (1993:27) notes that during her medical training (1942-1948) she

... learned to use all my senses, but especially the most important: common sense. And I learned above all that there was a difference between thinking and cerebrating. To cerebrating and again to cerebrating. I had had the perfect training for an architect! In the meantime I had met an engineering student who spent most of his time playing

– ¹⁶⁵ He returned to South Africa a few years later, begging for forgiveness for leaving his family. After promises of getting work in Durban and reuniting the family, a divorce was requested as he had met a widow on the boat from England who demanded he marry her! (Fagan, G.E. 1999:26).

guitar in the Cape Town night clubs and because his parents were concerned for his future, they sent him to Pretoria where he could become an architect, for that is what he was really destined to be, his mother thought and she was right. "n Vaal mot"¹⁶⁶ my family called him, but I found him handsome and loved him, and soon became intensely interested in the models which I helped him build over the holidays, and the books we read together on "modern architecture".

After completing her studies she practised general medicine, moving to the Transvaal to be closer to Fagan who had begun his studies at the University of Pretoria two years earlier. They visited each other during the university vacations (Fagan: 2011a) after Gwen started her medical housemanship at Standerton in 1948. This was the nearest hospital to Fagan she could find. She later completed a stint as an army doctor at One Military Hospital in Pretoria during the latter half of Fagan's studies and his Volkskas tenure. Fagan married his long time girlfriend in the Moederkerk in Stellenbosch (Fagan, 2011a) in December of 1949, in his fourth year of study (see Fig. 6.9).

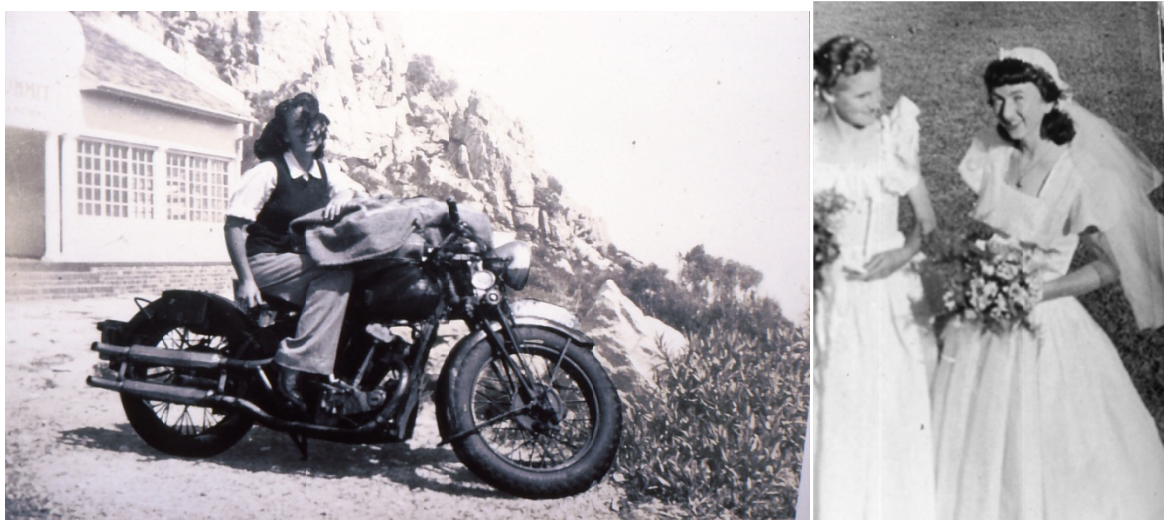


Figure 6.9. Left: Gwen on Fagan's motorbike c.1942. Right: Gwen at her wedding in 1949 (both Fagan archive, undated).

Fagan's relationship with his wife is an extremely close one. Mamma (as he affectionately calls her) has been part of his office as a researcher, supervisor and organizer (Fagan. G, 1993:27) since work began on restoring buildings in Tulbagh damaged after the 1969 earthquake.

My vrou Gwen, het haar mediese werk gelos om voltyds navorsing oor die huise te doen (Fagan, 2004:2).

[My wife Gwen left her medical work to do full-time research on the houses.]

Over the last few years she has also become a sounding board for his designs and she is the only one he trusts with this role (Fagan, 2008b). According to Lourens (2008) and Swanepoel (2012), she has also been involved in detail planning issues such as kitchen design and landscape design

— ¹⁶⁶ It was obviously a derogatory remark, meaning he looked like a grey moth flitting among the veld flowers (Fagan, 2012).

(Meintjies¹⁶⁷, 2012:1). She has now taken control of landscape design projects (a passion since childhood) and in 1988 published a seminal work *Roses at the Cape of Good Hope*. In 1995 she received a PhD from the University of Cape Town for a study titled "An introduction to the man-made landscape at the Cape from the 17th to the 19th centuries". She is Fagan's right hand woman and possibly idolises him in the same way that his mother idolised his father. They are constantly in one another's company and often still hold hands. They finish one another's sentences (she more than him) and share everything including a plate of food.

6.2.3. Music and technology

During his engineering studies, Fagan was clearly more interested in pursuing his technological interests and bought about thirteen second-hand motorcycles (see Fig. 6.10) that he repaired and sold on, finally purchasing, with the proceeds of his sales and music performances, an Adler¹⁶⁸, a German sports car.

One "dark and stormy night" in Rondebosch Avenue my friend Denis and I came out of his house. Two pairs of bare feet were sticking from underneath my Adler racing looking car. I made my presence known and two young boys in shorts came out from under the car eagerly asking for technical details of the motor, all the while dripping and shivering. When departing they made me promise to let them buy this vehicle. I turned to my friend laughing, surely these youngsters can't afford to buy the car. Denis told me they can, they are the sons of Judge Fagan (Kreft, 2005:8).



Figure 6.10. **Left:** Fagan on his B.S.A. 500cc "Police Twin" motorbike outside his parents' house in Newlands c.1944 (Fagan archive, undated). **Right:** Moto Guzzi motorbike still parked in the basement of Fagan's 156 Bree Street Office in Cape Town (author, 2010).

An interesting aside is that an advert was placed by the African Continental Trading Company in

– ¹⁶⁷ See Appendix J.

– ¹⁶⁸ The east elevation of Fagan's thesis project (see Appendix G) has an elegant representation of an Adler parked behind a tree.

the famous South African *zero hour* (sic) publication of September 1933 for a viewing of the Adler motor car. The advert notes that professor Walter Gropius of the Bauhaus had been appointed as the chairman of the Adler design committee. Fagan's journey into the Modern Movement had been unknowingly initiated! This does, however, demonstrate Fagan's natural appreciation of the relationship between function and beauty.

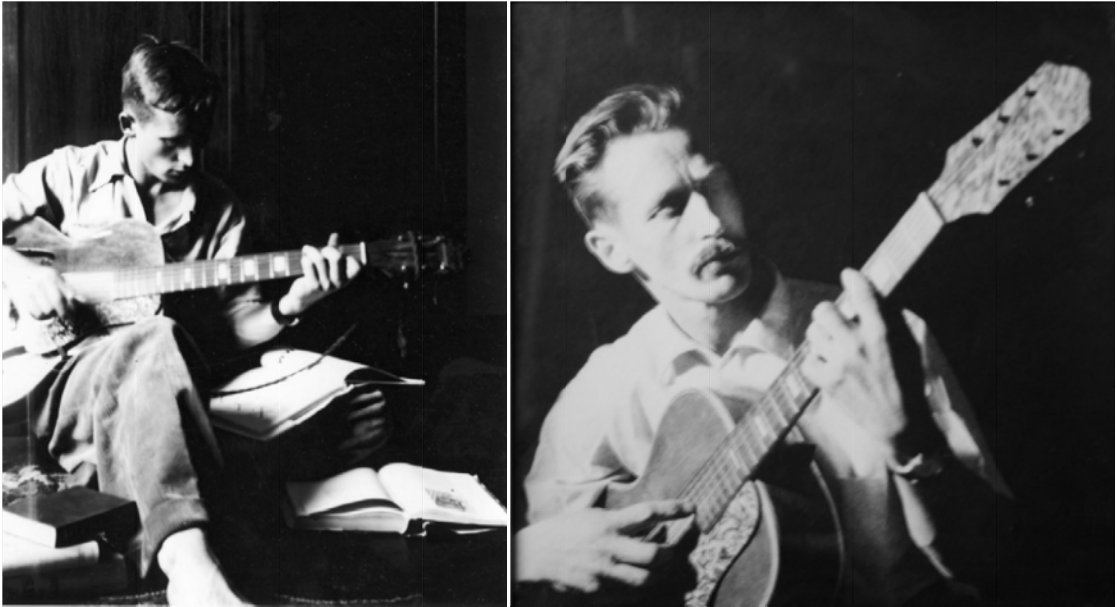


Figure 6.11. Fagan and his guitar as student in the 1940s and later as father and architect in the 1960s (Fagan archive, undated).

As a counter to the exploits in technology, Fagan played the guitar (see Fig. 6.11) in a night club jazz band in Long Street and at the ice rink in Plumstead, with fellow musicians Albie Louw on accordion, Boetz Ohlson on piano, Dick van der Velde on clarinet and saxophone and Gertjie Schreuder on drums (Fagan H.E., 2005). As the acoustic guitar was not loud enough, Fagan made his own amplifier with the help of a friend, Dirk Elzinga. According to his brother Hannes it was beautifully crafted in wood, but it weighed a ton! (Fagan J.J., 2009).

During this period Fagan extended an initial foray into flying. Fagan's younger brother, Hannes, recalls that Fagan made kites as a child, often with water bags attached, that could be mischievously released on unsuspecting locals (Fagan, J.J., 2009). Fagan and Hannes later took up flying lessons at the UCT flying club at Youngsfield. There the students could hire a Piper Cub for one pound ten shillings which, according to Hannes, was cheap at the price.

Apart from boats, I was always fascinated by flying machines, inspired by Leonardo da Vinci. (I even wrote my notes in mirror-writing, which I can still do!) I built a glider, which refused to fly when I jumped off a high wall with it. So when the opportunity arose through the UCT flying club, I was sure to grab it. Being younger, Hannes probably started two years later (Fagan, 2010b).

Fagan then started to take photographs from the air as a hobby, a passion which fostered the publication *Brakdak: flatroofs in the Karoo* in 2008. Another contextual influence had been added to his already honed and intimate understanding of water and earth. A technological spin-off of the "flying" photography was Fagan's construction of his own enlarger (Fagan J.J., 2009).

The time had come for Fagan to commit to a career after four years of recreational studies, musical exploits, merry maidens and technological tinkering. His childhood forays had reached maturity. A deep understanding of climatic elements and the earth provided a solid foundation for the experiences of the next few years. Although Fagan's 'part-time' engineering training did not result in a formal qualification it had provided him with a new (perhaps more scientific) set of tools that concretised his already developed sense of making.

6.2.4. The University of Pretoria

In 1947, Fagan registered for architectural studies at the University of Pretoria, after his mother had decided that it was time for him to leave the distractions of the Cape and attend what she regarded as one of the best upcoming architecture schools. Fortunately, the time spent on technical courses in the UCT engineering course did not go to waste:

I was exempted from having to repeat these subjects in my architecture course in Pretoria. I had also become a very good draughtsman, and probably have a better sense for engineering than most architect colleagues (Fagan, 2010b).

Fagan was educated at an important juncture in South Africa's architectural history. The Martienssen Modern Movement influence of the Witwatersrand School of Architecture (Wits) was waning after the architectural fraternity realized that aspects of orthodox modernism were not appropriate for the South African climate:

A rapid development of domestic architecture followed, culminating in Casa Bedo, Johannesburg (1936 by Cowin & Ellis), a free plan form and Miesian spatial organisation adapted to local conditions by wide eaves and a hipped roof reminiscent of Herbert Baker¹⁶⁹. Easily replicated by developers and speculative builders, it was also a model for many houses of the next two decades (Prinsloo, 1995:27).

These new directions created a unique synthesis of mediated Modern Movement ideals, a waning colonialist neo-Classicism and the influence of the enduring qualities of local climate and materials.

– ¹⁶⁹ In the author's opinion the Casa Bedo roof displayed the influence of Lloyd Wright rather than that of Baker.

6.2.4.1. Educational context

The first school of architecture in South Africa was established at the Witwatersrand University in 1921 under the guidance of professor Geoffrey Pearse (McIntosh, 1956:22). Soon thereafter part-time classes, taught by private practitioners and architects from the Public Works Department, also commenced at the Pretoria Technical College. In 1927, the Architects and Quantity Surveyors' "Private" Act was passed, which laid down regulations for education (McIntosh, 1956:22). When the Department of Architecture and Quantity Surveying was established at the University of Pretoria in 1931, an agreement was struck with Wits to allow Pretoria students to obtain a diploma in architecture from the Johannesburg institution. A fully fledged Pretoria school of architecture was established in 1943, when professor Adriaan Meiring (1904-1979) was appointed as its first chair. Part-time diploma and full-time degree courses commenced in March 1943 in the extramural building of the University, located in Vermeulen Street next to the State Library (Nation, 2008:1). A regional influence could already be detected in the type of staff professor Meiring appointed. Meiring (1967:18) recalls:

When I started the School of Architecture in 1943 and had to look for fellow architects to assist me, I appealed in the first instance to Eaton. He willingly agreed, giving us a great deal of his precious time and soon became an inspiration to both students and staff.

6.2.4.2. The academic environment

In retrospect, Pretoria had a very new broom and was untrammelled by ingrained prejudice or established tradition. Then there was the liberal choice of lecturers from a wide range of those who were acknowledged to be the leaders in their field. But probably the inevitable post-war feeling of sudden freedom and promise of an end to shortages and the development of Industry contributed most of all towards the creation of an inventive and innovative School. It was hardly surprising, in these circumstances that the first few graduates reached, in their turn, the top ranks of the profession (Nation, 2008:11).

The academic environment in Pretoria was very different to that of Cape Town. The language difference played a small role but the intimacy of the small classes and the friendships Fagan developed were instrumental in his developing passion for architecture. He notes (1996:5) that there were only six students from his first-year class of thirty-six (Nation, 2008:1) who finally graduated, and that the small classes had allowed them to receive intensive attention from the staff members of the department. Shelagh Nation (one of Fagan's classmates) describes her recollection of him as a student:

One of the older and luckier students was Gawie Fagan ... He had, in 1947, just switched from engineering to architecture and had a little Adler sports car that seemed

to be made rather like a Tiger Moth, out of canvas stretched over timber ribs. During the University rag period, in the small hours of the morning, I recall being driven in the Adler the wrong way round and round Church Square, hoping fervently that all the traffic officers were safely at home in bed. We were fortunate to have Gawie with us in the class because he set a really high standard for us all to compete with (Nation, 2008:8).

The students learnt a lot from each other and also devoured any new publication on architecture. Johan Jooste¹⁷⁰ suggests that there was a culture of exploration and enthusiasm at the university, so much so that students located and shared information on the latest architecture (Jooste, 2008a). Fagan's library at Die Es in Camps Bay still contains many of these publications, including the *Oeuvre Complète* by Le Corbusier. His relationship with Karl Jooste¹⁷¹ (1925-1971) (see Fig. 6.12) is particularly important in this regard as they shared a common love of the 'master's' work, as did most students at the time.

We considered Moerdijk's work 'way-out', we knew his churches and obviously the library but thought we knew much more than him. We did not appreciate him. We were revolutionary and Le Corbusier was our hero (Van Kerken).¹⁷²



Figure 6.12. Karl (Karel) Jooste probably in his mid forties (Photo courtesy of his son Johan Jooste, 2012).

Karl Jooste met with Le Corbusier three times and Johan Jooste (2008a) recalls that each time his father returned he was even more of a disciple. This influence as well as Jooste's working stint with Eaton must have rubbed off on Fagan. Johan Jooste recalls that his father and Fagan (after they had qualified) would visit each other regularly and spend long evenings discussing architecture, in particular Le Corbusier and Niemeyer (Fagan, 2011a). Karl would smoke his pipe and both would drink whiskey (Jooste, 2008a). Their long lasting friendship ended after Jooste's untimely death in a car accident in 1971 at the age of forty-five (Jooste, 2008b:5).

– ¹⁷⁰ Johan Jooste is the son of Karl Jooste, a close classmate of Fagan.

– ¹⁷¹ Karl was in his third year when Fagan arrived.

– ¹⁷² Henry van Kerken completed his diploma in architecture at the University of Pretoria in 1957.

6.2.4.3. The lecturers

Professor Meiring continued with his appointment of architects with a seemingly regionalist bias. Basil South (1915-1952), Cole Bowen (1904-1976) and Hellmut Stauch (1910-1970) played the largest roles in Fagan's education.

6.2.4.4.1. Basil South

It is uncertain when Basil South (1915-1952) (see Fig. 6.13) was appointed in the department (Steenkamp, 2003:5), but he died from the effects of tick bite fever while still a lecturer. Steenkamp notes (Nation, 2003:6) that he was a gentle giant and that the students could relate to him easily. He was knowledgeable and theoretically inclined, but with a definite pragmatic bias that distilled a design to its purest form.



Figure 6.13. Basil South. Photograph taken by Fagan presumably on the student trip to Cape Town c.1947 (Fagan archive, undated).

He emphasized the importance of context in all its guises and the importance of architecture as part of the arts and in fact craft, it seems, as he got students to help him build his boats (Nation, 2001). He taught through pointed and critical comment as he strolled through the studio, praising where he felt it was deserved (Nation, 2008:6 and Fagan, 2008a). Fagan (2008a) notes that he learnt the most from South and that he respected him more than any of the other lecturers. Nation (2008:20) recalls that she lived in

... Springbok Flats in Park Street, a three-storied block designed by Basil South. It was compact and comfortable and had a small balcony with French doors opening onto it and a view of a lovely old orchard. The building was well detailed and very easy on the eye, for he had designed it with successively decreasing floor heights, a subtle and effective device and one which few architects would have used.

6.2.4.4.2. Cole Bowen

R. E. Cole Bowen, a creative designer of individuality and great sensibility, worked with a clear and simple rationale and in his work and particularly his dynamic teachings at the school of architecture, introduced an adventurous attitude of independent, if less academic, thought (Anon, 1965:45).

Robert Edward Cole (Coley) Bowen (1904-1976) (see Fig. 6.14) taught at the University of Pretoria between 1946 and 1953.

He was a big man with an even bigger personality. He'd lost a leg to a landmine in North Africa a couple of years earlier and it seemed to us that he'd lost his good humour with it. The prosthesis clearly was a source of pain and irritation so we didn't expect gentle treatment, but hardly anticipated what came next. The words were forceful. "...Don't expect an easy ride... You'll work your backsides off ... I'll be teaching you Building Construction..." Then came some cautionary phrases, designed to cut down to size anyone who still felt the satisfaction of completing the school years and making it to University. Then he turned on the four of us¹⁷³, his face flushed. "And as for you bitches," he said, and the four of us goggled "you don't belong in architecture. Women don't. I suppose you're here for the ride... so sit down and shut up..." (Nation, 2008:introduction).

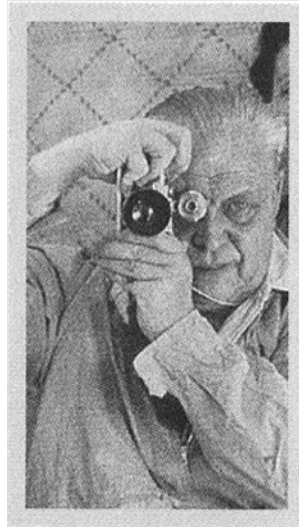


Figure 6.14. Cole Bowen behind his camera (Steenkamp, 2003:4).

The descriptions given (1953:36) in the SAAR of Cole Bowen's series of courtyard houses built between 1950 and 1951 give insight into his way of working and possibly his way of instruction. He notes that the needs of the family are paramount, while climate and materials act as the other design informants. In his houses, living and sleeping spaces are all orientated north with roof overhangs carefully calculated to keep the sun out in summer. As the clients were not wealthy, an

— ¹⁷³ Nation is referring to the fact that there were only four women in the class of thirty-six.

economical and efficient layout had to be designed. Entrance halls are done away with and services are combined to allow the

... alleged 'machine for living' to function on 'tick-over' and 'full-revs' without a sticky trail of services stretching embarrassingly in front of family living and entertainment (Anon, 1953:37).

Nation (2008:9) notes that Cole Bowen was a practical architect and insisted on students knowing exactly what it was they were drawing, so much so that items of clothing had to be measured so that shelf sizes could be designed accordingly. Fagan (2008a) criticises Cole Bowen's meticulous detailing and fastidious knowledge of housewives' cutlery collections as this approach limits flexibility and orders people's lives too much.

6.2.4.4.3. Hellmut Stauch (1910-1970)

Hellmut Stauch (see Fig. 6.15) was born in Germany, studied design at the Ittenschule and thereafter at the Technische Hochschule Berlin, and emigrated to South Africa in 1935 (Steenkamp, 2003:3). He joined the department in 1943 (Steenkamp, 2003:4) and taught there for five years. He was well liked and respected by the students. He was a perfectionist (Steenkamp, 2003:6) in functional terms and, probably due to the economic circumstances of the time and his Modern Movement training, believed that nothing must be wasted, least of all space. He taught, not by discussion, but through his 6B pencil.



Figure 6.15. Hellmut Stauch (Garden and Home, May 1969).

Fagan recalls that Stauch was his third-year studio master and that he taught through example:

Hellmut 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 (Fagan, 1996:8).

Fagan admired Stauch not only for his architectural abilities but also for his sailing prowess (Fagan, 1996:8) and indicates (2008a) that he was on a very good footing with Stauch because of this common sporting connection. Fagan was particularly taken by Stauch's small double-pitched houses on the standard steel window module of 'three foot, four and half inches' and regards them as classic examples of an inventive regionalism.

Nation¹⁷⁴ (2003:2) mentions that Stauch preferred the angled roof with no ceiling as it limited wasted space and added to the drama of the room. Peters (1998:176) describes Stauch's houses of the 1930s as having attenuated rectangular plans with north orientation, Miesian structure and space and an interior-exterior connection. The economical use of space and the direct relationship between building and landscape must have inspired Fagan. Stauch's later interpretations of his experiences in Brazil fostered a more haptic and organic feel in his architecture, particularly evident in his own house Hakahana. Fagan recalls the value of teachers like Stauch:

[S]o many lessons are still to be learned from work by architects like Eaton (Fagan, 1991a:8),

and

... Eaton for having learned from Frank Lloyd Wright's Prairie houses and Hellmut Stauch (I had the privilege of having both these men as studio masters) who brought with him the discipline of the Bauhaus and later the intoxicating South American forms after his visit to Brazil (Fagan, 1991b:10).

6.2.4.4.4. Norman Eaton (1902-1966) (see Fig 6.16)

Norman Eaton, a graduate of the University of the Witwatersrand and protégé of Gordon Leith, although an adherent of the contemporary school, retained his sensitive appreciation of materials and detail, and displayed an independence in his attitude towards design which he has described as an endeavour to achieve visual quality and character which bears reference to the general 'feel' if not the actual form of man-made things, peculiar to the African continent (Anon, 1965:45).



Figure 6.16. Norman Eaton (<http://www.artefacts.co.za/main/Buildings/archframes.php?archid=450&countadd=0>) [Accessed: 12/04/2012].

– ¹⁷⁴ Nation worked for Stauch, eventually becoming a partner in his firm.

Norman Eaton was a lecturer¹⁷⁵ during Fagan's tenure (Fagan, 1996:5), but Fagan also learnt about his buildings through classmates like Felix Viljoen and Karl Jooste who worked for Eaton for a number of years. He also remarks (2008b) that he probably did not appreciate Eaton's work even though they saw Greenwood House evolve through its construction process. Fagan describes him as a 'moelike ou stront' [a difficult old shit].

Nation (2008:10) notes that

... we were fortunate in having Norman Eaton also still living and working in Pretoria, and the masterful use of materials in his buildings impressed and influenced us. We always hoped that he would become one of our lecturers but he had no interest in students and turned down all approaches from the University.

6.2.4.4.5. Gordon McIntosh (1904-1983)

Gordon McIntosh, second graduate of the Witwatersrand School of Architecture and one of the original three protagonists of the modern movement, retained a firm belief in the logic of functionalism in its broadest sense, and combined his unique ability in structural design with a dignified restraint in architectural design and a sensitive use of material (Anon, 1965:45).

Prinsloo (1995:27) notes that McIntosh was one of the first proponents of the international and orthodox Modern Movement style in South Africa. House Munro in Pretoria exemplified the spatial and formal characteristics of Mies van der Rohe's and Walter Gropius's work. Nation indicates (2008:15) that he was a quiet man and did not inspire the students in the school much as he was not flamboyant enough. She also describes that "the 'form follows function' principle dominated and this married very well with the frugal approach thrust upon us all by general post-war shortages".

McIntosh taught theory of structures and was associated with the University of Pretoria's engineering department in 1929 as a part-time lecturer, but was later closely involved with the establishment and organization of the school of architecture.

6.2.4.5. The course

The architecture course at the Pretoria School was driven by technology and function with little theoretical investigation (Fisher *et al*, 2003:69). The history of architecture was important but Nation (2003:1) notes that very few students enjoyed it. According to Johan Jooste the course included a

– ¹⁷⁵ Harrop-Allin (1975:57) notes that Eaton taught design classes on a part-time basis but stayed only for one year thereafter, acting as an external examiner only.

substantial focus on the Renaissance, as he was handed down a large collection of books on the art and architecture of this period (Jooste:2008). Fagan (1992a:2) recalls that Sir Bannister Fletcher's *History of Architecture on the comparative method* was his bible. Steenkamp (2003:8) observes that

... there was little appreciation for 'old' architecture ... Herbert Baker's work was thought outdated and over designed. Moerdijk, who had been instrumental in establishing the school, was considered too traditional.

It was the Modern Movement architects Le Corbusier and Niemeyer that the students found most inspiring. Fagan (Fagan, 2011a) notes that Niemeyer differed in his modernist approach from Le Corbusier as he was not a "slave to the right angle". Steenkamp notes (2003:8-9) that Mies van der Rohe's work was also admired but that Frank Lloyd Wright's work was seen as too fussy. Fagan remembers that when they (as students) saw Ronchamp for the first time it was as if they had been hit by a ton of bricks.

Gawie Fagan's reaction sums it up: "Ons dog die ou is die kluts kwyt" (We thought the man had lost his grip on reality) (Steenkamp, 2003:8-9).

But the progressive aspects of Modernism were not lost. New ways of thinking about space and advancements in technology still played a major role in the new architectural direction, and a synthesis was achieved between international trends, modern ways of living and local contextual requirements.

To this day Fagan stresses the importance of initial sketches that express the essence of a design. His archives are a testament to this approach as there are hundreds of A4 pages (quite often recycled ones) covered with tiny explorations in client files. This discipline was inculcated in the Pretoria students:

Thumbnail sketches and proportional systems were pushed as Johan Jooste elaborates: "Jooste and his associates spent most of their professional lives developing proportional systems based on classical ratios and the work of Hambidge and Le Corbusier (Jooste, 2008a:1).

6.2.4.6. Fagan's student work¹⁷⁶

Only three of Fagan's first-year projects have survived. Two were published in the SAAR¹⁷⁷, which attests to the high regard the lecturers had for his work. The first (a midyear drawing) is a meticulously drafted construction of classical details (see Fig. 6.17). The second, dated August 1947, is a design for a seaside bungalow (see Fig. 6.17), which demonstrates a close affinity with the work of Stauch through its use of the butterfly roof and modular organization. Although the plan shows a

– ¹⁷⁶ See Appendix G for more images of Fagan's student work.

– ¹⁷⁷ Volume 32 of 1947 p.284.

Miesian control of space through connected planes, there is a definite regional inflection in the use of stone walls and roof overhangs. The projects also demonstrate excellent draughting skills and a mediated Modern Movement architecture more aligned with Marcel Breuer¹⁷⁸ (through the influence of the bi-nuclear plan) (see Fig. 9.17) and the regionalist leanings of Le Corbusier in houses such as the Villas Mandrot and Le Sextant in France (Tzonis, 2001:119) or Villa Errazuris in Chile (Tzonis, 2001:116). Meticulous attention is paid to planning, probably due to the influence of Cole Bowen and Stauch.

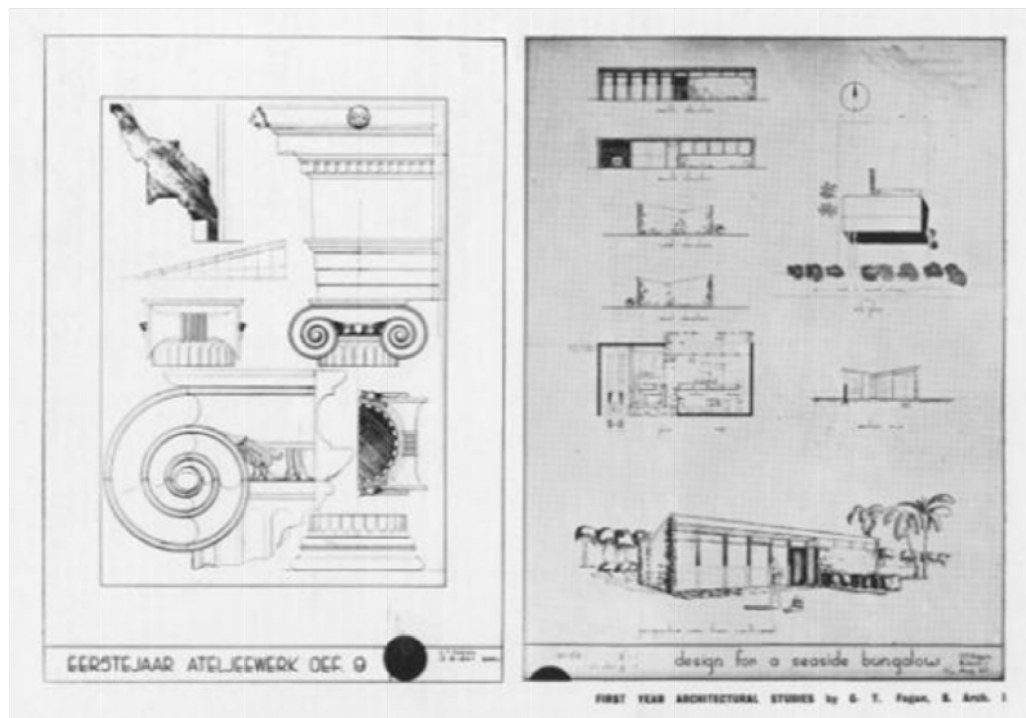


Figure 6.17. First year architectural studies prize to G.T. Fagan (Anon, 1947:284).

The beginnings of an attenuated plan are also visible and a third-year project by N.G. Meyer in the same issue of SAAR (1947:285), a double storey office block for a country town, is telling in its similarities to Fagan's bungalow. A rigid grid, mono-pitch roofs and stone walls form the architectural palette (see Fig. 6.18). The influence of the teaching staff and mediated Modern Movement responses were already clearly visible in the student work.

— ¹⁷⁸ See Appendix J.

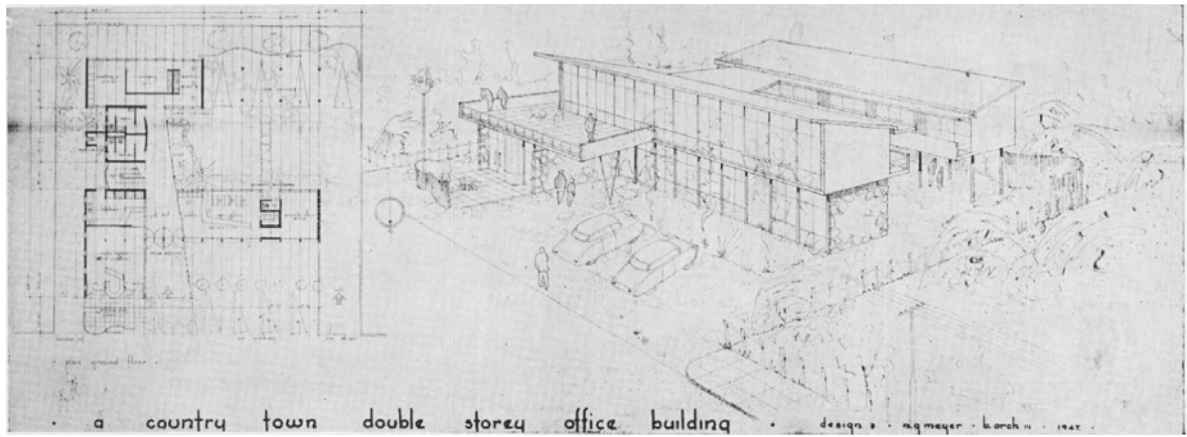


Figure 6.18. Third year architectural design prize to N.G. Meyer for his country town office building (Anon, 1949:285).

The third first-year project has survived in Fagan's archives only as a photograph of a model. The attenuated plan of a seaside (lakeside perhaps) cabin with mono-pitch roof exhibits many of the previously described influences (particularly the extended deck and ramp reminiscent of Breuer's houses), but the dialectic of the tectonic and floating upper floor and of the grounded basement walls set the scene for many of the architectural devices that Fagan would use in his later career.



Figure 6.19. Model of Fagan's bungalow (Fagan archive, undated).

Fagan's third year project for a block of flats in Pretoria (see Fig. 6.19) displays a more subtle regional inclination in its use of materials and balcony sun screening. It is reminiscent of Fassler and Cooke's and Hanson, Tomkin and Finkelstein's reinterpretations (Chipkin, 1993:170-171) of projecting Modern Movement balconies, and of Harold Le Roith's¹⁷⁹ (1906 to ?) Cranbrooke Hotel in Johannesburg (Fassler, 1956:178) (see Fig. 6.20).

— ¹⁷⁹ See Appendix J.

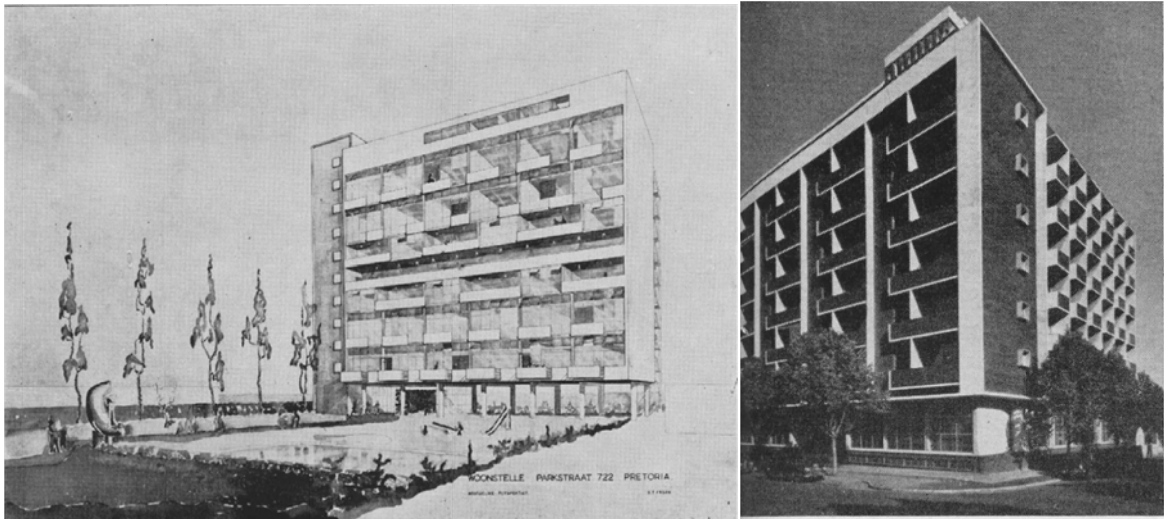


Figure 6.20. Left: Fagan's third year project for a block of flats in Pretoria (Anon, 1949:240). Right: Cranbrooke Hotel Johannesburg by H. H. Le Roith (Fassler, 1956:178).

Only one university project remains as a complete set of drawings in Fagan's archives, namely his final-year project (see Fig. 6.21). A 120-bed children's hospital for Pretoria represents a mediated Modern Movement response but does not reflect a particularly regionalist approach. It is reminiscent of Breuer's Whitney Museum in its panelled facade treatment and limited number of windows, but the roof garden and entrance porticoes are closer to Niemeyer's reinterpretations of Le Corbusier's Dom-ino system.

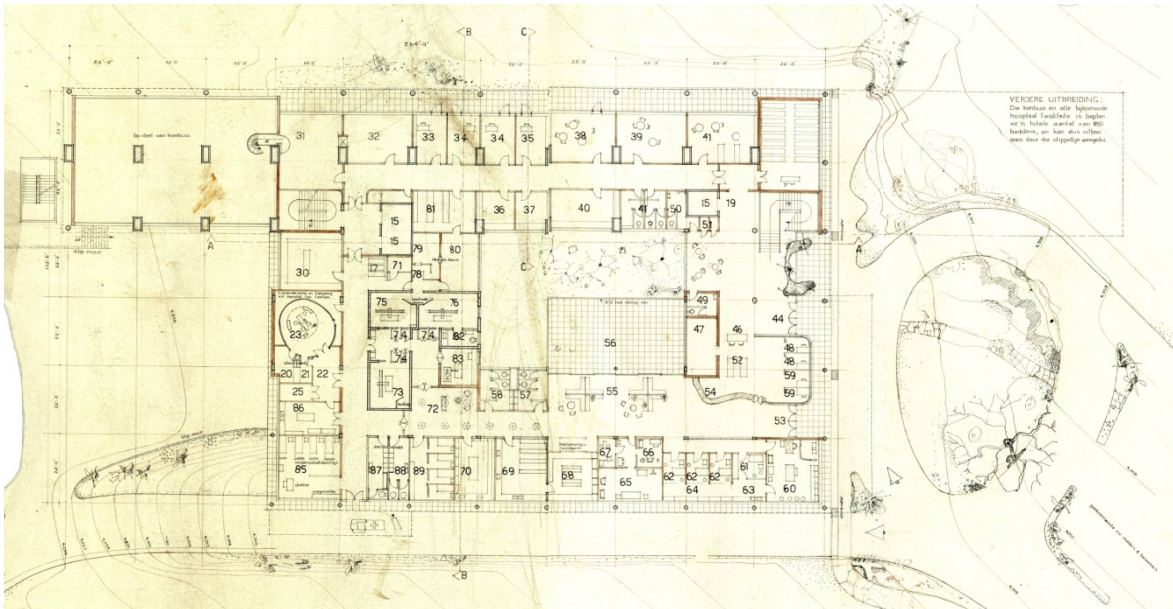


Figure 6.21 Plan of Fagan's thesis project (Fagan archive, undated).

Fagan's university designs display experimentation with both the orthodoxy and vernacularism of Le Corbusier's oeuvre, and mediations of the work of other Modern Movement architects such as Breuer internationally and Stauch locally. The projects mediate between Modern Movement canon and local conditions albeit in a very limited way. In the hospital project, there is little plasticity to be

noted save for the entrance counter, the X-ray room and roof garden elements reminiscent of the Unité d'Habitation. It is interesting to note that Jooste's early built work was also made in an orthodox Modern Movement way and Johan Jooste notes (2008a) that it was only really in the 1960s that his father's work began to take on a vernacular feel with organic forms, probably influenced by local rondavels and materials of an earthy quality. Fagan's house for his parents, designed in 1951 when he was a final-year student, certainly exhibits a formal regional response to the Cape vernacular, but still closely follows Le Corbusier's work in terms of organization and movement. One singular moulded element peeps out of the east-facing living room wall (see Fig. 6.22). Was this a hint at the plastic vernacular manipulations that were to follow?



Figure 6.22. East edge of living room at House Keurbos (1951) (Photo courtesy of Leon Krige photographer, 2010).

6.2.4.7. Fagan the student

Fagan lived in Rondegeluk opposite the Union Hotel in Church Street, accommodation that was paid for by his parents who financed his life and studies fully while he was studying in Pretoria (see Fig. 6.23). During this period of intensive academic exploration, Fagan's creativity in terms of music and mechanical technology took a back seat.



Figure 6.23. Fagan as student in Pretoria at Tiny Town after an attack by burglars c.1946 (Fagan archive, undated).

His new-found passion was all consuming (Fagan: 2010a) and he got good marks as he was interested in the course. But a constantly developing and inventive pragmatic bias still lurked in his architectural life:

Drawings were prepared with a T-square and a set-square on a board propped up on bricks on trestle tables. Parallel rulers became available but were generally too expensive; Gawie Fagan made himself one and many students followed suit (Nation, 2003:8).

Students were encouraged to work for practising architects while completing their studies. Fagan's two close friends, Felix Viljoen and Karl Jooste (see Fig. 6.24), both worked for Eaton. Fagan notes (Fagan, 2010b) that he worked for Jeff Mazureik in Pretoria during some of the university holidays as well as for Wynand Smit (Fagan, 2011a).

Practical experience played a large part in student development and most of the bigger firms tried to accommodate one or two students as trainees and general dogsbodies during the 3-month year end break. There was fierce competition for the few jobs available (Nation, 2008:11).

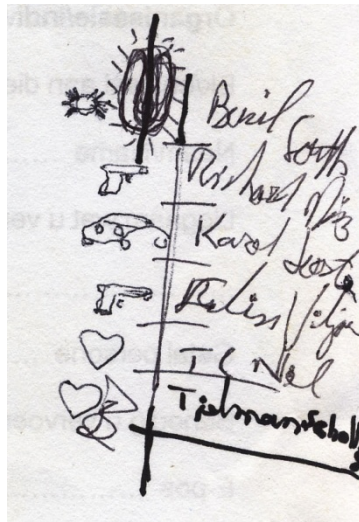


Figure 6.24. Diagram, drawn by Fagan in 2008 on the back of sketches for the unbuilt House van Zyl (2007), that describes the untimely deaths of personalities associated with Fagan at the University of Pretoria. Fagan's lecturer Basil South died of a heart attack after suffering tick bit fever, Richard Monig committed suicide after an extramarital love affair, Karl Jooste died after an accident in his Lotus sports car, Felix Viljoen also committed suicide after being diagnosed with a fatal disease and T.C. Nel and Tielmann Scholz both died from heart failure.

Fagan finished his Pretoria University education in December 1951, the same year and time that Le Corbusier presented plans of his vacation cabin in Cap-Martin, France as a birthday present for his wife (Tzonis, 2001:172). As Le Corbusier's career waned so Fagan's was just beginning.

6.3. Third initiation (1952-1964): The banks – corporate expression and regional inflections

After completing his university studies in 1951, Fagan was persuaded to join Volkskas Bank¹⁸⁰ (see Fig. 6.25) as their in-house architect by a classmate, Mike Eksteen, who was already working there (Fagan, 2001). After Eksteen left, Fagan took over as architect in charge, remaining in this position for twelve years. Clyde Meintjies¹⁸¹, (2005:1) describes the working conditions:

Gawie's office was on a south-facing upper floor of the old Volkskas building in Pretoria, with a good view down onto Pretorius Street. Here we worked in one quite intimate space with room only for three or four drawing boards and a few filing cabinets. It was relaxed and informal although, as Volkskas amptenare (officials), we were required to wear a jacket and tie to work. Volkskas would have liked to see Gawie in a dark grey suit (like the rest of the "grey" men in the bank) but he always wore a sports jacket and flannels, like we did, and his tie was always loose and skew.

– ¹⁸⁰ For more detail about the bank see *Van Akker tot Eik, die verhaal van Volkskas 1952 – 1981 [From acorn to oak: the story of Volkskas 1952 – 1981]*, published by the bank.

– ¹⁸¹ Clyde Meintjies (1936-) (See Appendix J) joined Fagan at Volkskas in 1959 and worked there until 1961. He later worked for Fagan in Cape Town from 1967 to 1969.



Figure 6.25. Fagan and Dr. Hurter, who was chairman of the board of directors of Volkskas bank, at the opening of the Strand branch in Cape Town on 24 April 1975 (Engelbrecht, c.1981:286).

6.3.1. Brakdakke

As Volkskas expanded its branches into little country towns all over South Africa, Fagan was required to do extensive travelling. His love of and experience¹⁸² in flying and his frugal nature allowed him to persuade the Bank to lend him the money to buy a plane and pay him the same rate per kilometre as a motor car. As Fagan explains,

I had an increasing amount of car travel to do as we built and adapted buildings for the fast expanding bank. Often no bank car was available, when I would use my own car for 9 pence per mile. The travel time became excessive as our building portfolio expanded, so I suggested they get me a plane. I was clearly told that even the general manager did not have one, but when I offered to buy my own one if they would pay me the same 9 pence per car mile, I bought my trusty Tri Pacer on a bank loan (4,5% staff rate). At first I kept it at Wonderboom which was about eleven crow miles from the farm, and subsequently at home after building the hangar. Gwen says our pet monkey Chika would hear the plane approaching home before they could, and would start chattering excitedly (Fagan, 2010b).

The trips across the country to visit banks under construction or investigate the possibilities for new branches brought Fagan into contact with outlying areas that would have gone undiscovered by car. Slowly he began to document these places and buildings, and through this endeavour an appreciation for vernacular architecture was developed. As Meintjies (2005:3) notes:

He often flew alone, sometimes to Cape Town, and when these trips took him over the northern Cape he would from the air identify the (then) numerous brakdak farmsteads, later to go back and record them photographically. He always used his beloved Linhoff camera with its six-by-nine centimetre format and rise and tilt movement.

– ¹⁸² Meintjies (2005:3) notes that Fagan had chalked up more than a thousand flying hours in his log book while at Volkskas.

This endeavour was encouraged by the friendship Fagan developed with Barrie Biermann who was teaching at Natal University. Fagan recalls (2008b) that Biermann visited him at the Kameeldrift farm. Their common love of Karoo architecture drew them closer and Fagan recalls (2008e) that he was about to embark on a master's degree on bank architecture, but Biermann suggested he change the subject and photograph the flat-roofed Karoo houses on his trips. Fagan finally published these images in a 2008 publication entitled *Brakdak: flatroofs in the Karoo*, dedicated to Biermann. He recalls the encouragement he received from Biermann:

One of my most treasured mementoes of those days is a copy of Barrie Biermann's 'Boukuns in Suid Afrika', bought in 1957 and inscribed by him 'sterkte met die soek na Brakdakke' (all the best with your search for the flat roof) – for it was Barrie who inspired me even in those early days to look again especially at what is probably our most moving but least known vernacular architecture – that of the Karoo, which I had grown to love from the school holidays spent there annually (Fagan, 1983b:3).

The many flying trips (see Fig. 6.26) that Fagan made not only sensitised him to the differences in our physical and built landscape but also furthered his understanding of climatic elements and their relationship to form. The sense of control and haptic qualities of sailing were now extended to flight. The experiences must have echoed the description of a plane that Le Corbusier made in *Vers une Architecture*:

What you see in the photograph is the padded edge of a powerful machine; the dials by which you know its performance; the stick by which you dominate it; the map on which you choose where you want to go; the compass by which you know where you are going. In short, the poetic experience of flying an airplane (Passanti, 1997:447).



Figure 6.26. Left: Fagan's Tripacer in the Karoo with Fagan and presumably a bank official c. 1950s (Fagan archive, undated). Right: Fagan's Tripacer at Wingfield in Cape Town c. late 1950s (Fagan archive, undated).

Fagan became a skilled pilot, managing to land his plane on a very small runway at the Kameeldrift farm. Fagan notes (2010a) that it was a difficult landing due to the power lines and trees. Meintjies recalls their flights from the local Pretoria airport:

So began the period of "Zed Es Delta Golf Oscar". A call sign frequently made to the nearest flight control tower to advise that a small fabric-covered high-wing monoplane

– Gawie's four seat Piper Tri-Pacer, ZS-DGO – was in the air (the trailing wire aerial, with a little cone at its end, had been unwound). Usually from Wonderboom airport, having first done the pre-flight checks, draining any water from the carburetor (sic) or fuel tank, checking the controls and setting the gyro-compass. Then, as soon as it was possible to vaguely make out the horizon in the breaking dawn, we would take off (Meintjies, 2005:2).

In January 1955, Fagan, after convincing Volkskas management to allow him to make a trip to Lourenço Marques, documented old and new Portuguese architectural influences. Buildings are unnamed in the little document (Fagan, 1955) but their material and technological importance is described. A number of Pancho Guedes buildings are included. The Aeroplane house (See Fig. 6.27) is well documented and must have played a role in the development of the chimney at Fagan's Paradys house in 2003 but Fagan notes (2011b) that

... Guedes was certainly also an inspiration, but hunting for a yard for our caravel in 1988, I had visited the source in the Algarve ... where these imaginative traditional chimneys are common, and from where Guedes almost certainly got his own inspiration (see Fig. 6.27).

Fagan's visit to Portugal before sailing on a reconstructed caravel from Portugal to Mossel Bay in 1988 must have sensitised him to these influences.

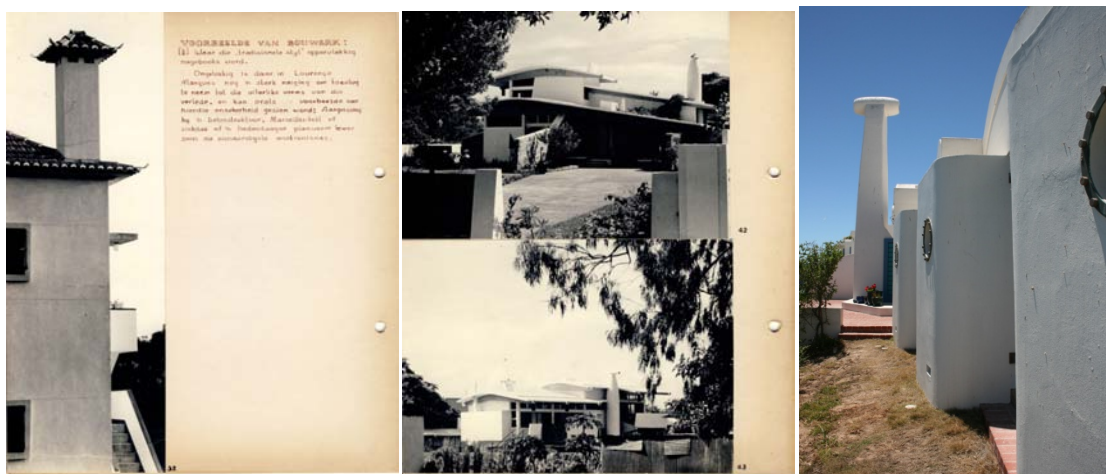


Figure 6.27. Left: Fagan describes types of construction in Lourenço Marques but the image of the 'traditional' chimney is perhaps more telling (Fagan, 1955). Middle: Guedes's Aeroplane House with exaggerated chimney which possibly inspired the chimney at Fagan's Paradys house (Fagan, 1955). Right: Chimney at House Paradys (2003) (Author, 2009).

6.3.2. A new architectural approach

Fagan was pressurized to provide Volkskas with a corporate image, but resisted and persuaded them to adopt a more contextual approach. The place-specific bias of his Pretoria education had made its first indelible mark.

When I was resident architect for Volkskas, Gilbert Colyn was doing all the Trust Bank buildings. He sold his clients the "corporate image" notion, an easy way to replicate his black glass facades in many a hapless 'dorp' (little town). I had to convince Volkskas that their name in classic Roman brass letters would suffice, but that the buildings should otherwise be adapted to their environs – a more difficult route but one that would not violate any particular village atmosphere. That is why Mr C. L. Engelbrecht, head of Volkskas premises department, once said my buildings say "verskoon my dat ek hier moet staan" (I am sorry that I have to be here) (Fagan, 2008e).

Fagan recalls (2005a) that Volkskas could only invest twenty-five percent of its total capital in fixed property, and with the large number of banks that had to be designed or altered they had to work extremely economically. During the thirteen years Fagan worked for Volkskas he oversaw a rapid bank expansion programme with a portfolio of over two-hundred buildings, twenty-five being new projects (Fagan, 2010a).

6.3.3. The banks

Fagan's new banks were designed with the functional principles of the Modern Movement in mind. They had clear plans and well defined zones of activity. Services were grouped with a Cole Bowen inspired tightness, and the regular grid of his student work and the use of Hambidge's proportional systems could clearly be seen in the regularised fenestration. The Belfast bank's butterfly roof developed the Stauch model through its ceiling manipulation. The mediated Modern Movement approaches learnt by Fagan also developed a haptic sensibility through the manipulation of light and materials. The latter began to play a large influence through Fagan's adaptation of local conditions to make the banks straddle the dual concerns of corporate image and local appropriateness. Although the buildings had stature they avoided a classical approach and because of their low and intimate scale they merged quietly into their surroundings. In the Cape Fagan designed his second interpretation of the Cape vernacular. His parents' house had initiated a concern for expressing the plastic qualities of local architecture and Fagan extended this in the Montagu bank (See Fig. 6.28), where large painted-brickwork portico columns provide stature but extend the plasticity of Keurbos's living room walls.



Figure 6.28. The Montagu branch of Volkskas as it existed in 2008. The street presence and corner treatment are still strong features while some of the interiors have survived in the new commercial arrangement (Author, 2008).

6.3.4. Family life

This was also a time of expansion for the Fagan family, with four children (See Fig. 6.29) being born from 1951 to 1957. Henry Allan¹⁸³ was the first and only son, followed by three daughters, Helena Elizabeth in 1954, Jessie in 1958 and Alida in 1957. Later the two oldest children attended the local German school.



Figure 6.29. **Left:** Gwen and Henry shortly after his birth in 1951. **Middle:** Gwen and the first three children Henry, Helena and Jessie at the beach c.1956. **Right:** All four children posing for yearly family Christmas card c.1963 (All Fagan archive, undated).

A smallholding in Kameeldrift, outside Pretoria, was purchased from Basil South's estate after he died from tick bite fever (See Fig. 6.30). Here Fagan started a small dairy, probably inspired by the

– ¹⁸³ Henry Allan Fagan (named after his grandfather on Fagan's side of the family) has established himself as one of the most creative structural engineers in South Africa. He practises from a restored building right next door to his father's office and has collaborated with Fagan on many projects.

experiences of the Hopetown holiday excursions. Fagan divided his time between Volkskas projects, the family and the dairy until the latter became unviable due to time constraints and it's being a drain on their finances. It was on the farm at Kameeldrift that Fagan began his first forays into building. The first project was the construction of a hangar cum garage (See Fig. 6.31) for the ever increasing modes of transport the family acquired, and a water tower to supply farming needs. Fagan (2010b) recalls that he welded the trusses and laid a few bricks every morning before going to the office. Meintjies (2005:3) notes that Fagan built

... the hangar on the farm with its home-made post-tensioned lightweight steel roof trusses with a span of 10 metres or more [and the] circular brick water tower with corbelled courses for the flared top ... (Meintjies, 2005:3).



Figure 6.30. Fagan and family with their workers on the Kameeldrift farm and the Tri-pacer ZS-DGO in the background c.1958. (Fagan archive, undated).

A further addition was a new living room with slanted front walls and a stone chimney to the existing house (See Fig. 6.31). These forms were reminiscent of the living room edge condition at his parents' Cape Town house and merged into the landscape through material and colour.



Figure 6.31. Left: Fagan's expanding family of vehicles. From left to right in the hangar: an Allis Chalmers tractor, Fiat Multipla car, Piper Tri-pacer ZS-DGO, Peugeot 403, BMW 600 bike and an International 3 ton truck (Fagan archive, undated). **Right:** Fagan's extension to the Kameeldrift house in Pretoria (completed around 1962) as it existed in 2008. The stone chimney and splayed walls are the hallmark elements reminiscent of the only house Keurbos (1951) completed by Fagan by that date (Author, 2008).

In 1960 Fagan took his wife on an extended overseas trip, shortly before their return to Cape Town.

[We] left four children with relatives, hired a Deux Chevaux in Paris, made a straw bed in the back and travelled 6 000 kilometers through Europe armed with a "Bannister Fletcher" and two pounds a day to spend. When we arrived home with swollen gums and scurvy skins, I felt my architectural education was complete (Fagan, G.E., 1993:27).

After the untimely death of Fagan's father on 6 December 1963, Gwen and the children returned to Cape Town almost immediately, to stay with Fagan's mother in her Keurbos home. Fagan remained in Pretoria to sell the farm and wrap up his work with Volkskas. He resigned in 1964 and returned to his home town after an absence of eighteen years. The lessons of a respect for place, an economy of approach and an inventiveness of form would not be forgotten. They would, in fact, provide the basis for a new career in heritage conservation and the start of an architectural practice that would produce a seminal array of domestic buildings. It was perhaps the distance from Cape architecture for such a long period that allowed Fagan to appreciate and comprehend its subtle nuances and underlying principles more clearly than if he had had constant exposure to it.

6.4. Fourth initiation (1964-): Conservation work

Architectural conservation has formed a very large part of Fagan's practice since he returned to the Cape in 1964 after his father's death, undertaking his first project La Dauphine in 1966.

So after packing our goods and chattels in Pretoria, we returned to Cape Town where I nailed a notice to a backroom door in Adderley Street. The ensuing years of practice have been fortunate in that the work has always included a fair proportion of restoration work (Fagan, 1983b:3).

Conservation work provides a counter to the new commissions that the office receives, but its influence is all pervasive and has had a major impact on Fagan's domestic architecture, as Chapter 3 has shown. Biermann (1975:2) describes Fagan's approach:

Deur hierdie selfopgelegde dissipline het Fagan hom geskool om restourasie werk te onderneem met die geesdrif en toewyding wat gewoonlik net deur eie skeppingsdrang aan 'n kunstenaar ontlok word.

[Through this self-imposed discipline Fagan taught himself to undertake restoration work with the enthusiasm and dedication that is usually only evoked through the personal creativity of an artist.]

Fagan describes the value of conservation work in his practice:

Let me immediately say: new design is much more exciting! But restoration also brings its rewards and through the research and work you feel part of our history (Fagan,

c.1975:8).

Fagan's conservation ethic has drawn on the contextual educational influences of the Pretoria architecture school, a design methodology of first principles instilled there, an understanding of place initiated by an upbringing in the Cape, and the twelve year stint for Volkskas where projects were undertaken in many different climatic and topographic locations and where the development of a sympathetic attitude to place and materials outweighed corporate aspirations. These influences stood Fagan in good stead for one of the first conservation projects he undertook – in the Tulbagh Main Street, the place where his father was raised. It was during this period that Fagan's wife began to play a more direct role in the office.

[I]t was to be nine years later before I was shaken out of my medical career by an earthquake and brought face to face with the practical problems and responsibilities of the architect when Gawie brought the wife he had been training for more than 20 years into his office to extend his personal role of researcher, supervisor and organizer for the restoration of 28 buildings in Tulbagh. And to assist with landscape design, a subject which had been my passionate interest since childhood (Fagan, G.E., 1993:27).

Fagan notes (2002a:1-2) that at that time there were few guidelines for conservation practice.

I have had to formulate my own ideas because, unless you want to refer back to Ruskin, or Pugin, or Kendall and Eaton closer to home, there was very little available by way of conservation guidelines in English when I received my first commission, namely the beautiful Franschoek homestead La Dauphine in 1966 ... After all ICOMOS was only instituted in Paris in the 1960s, the York university course started in 1972 and the Australian Burra Charter was formed as recently as 1999.

But Fagan's attitude to conservation is not limited and does not result in a stagnant or singular formal solution. He approaches each problem on its own merits and as Frampton (2007) described it in a letter of recommendation for honorary membership of the American Institute of Architects:

... he has run the full gamut from an Afrikaans modernity bordering on pastiche to the hi-tech spectacular idiom that he has recently inserted into [the] traditional pitched roof fabric of Cape Town University.

The dialectics of conservation and preservation are clearly evident in Fagan's approaches to tradition, as he alternates between clearly articulated representations of the past to completely contrasting additions. The Tulbagh Main Street renovations replaced (in Fagan's view) what had been damaged in the earthquake of 1969¹⁸⁴. At the Castle of Good Hope in Cape Town a lost complex of buildings were recreated, while at the other end of the scale additions to the Newlands Brewery, new Waterfront Clock Tower Bridge and the addition of the Infectious Diseases building at the University of Cape Town all provide stark contrasts with their existing fabric. The transformation

– ¹⁸⁴ These were based on photograph of the town before it was Victorianised.

of the Bartolomeu Dias Museum in Mossel Bay expresses a middle ground approach.

There is another aspect of the examination of design sources which also affects the architect's approach to restoration. This is interpretive, considers the sequence of designs as a whole, and allocates the design tradition a place in the history of architecture. In the past there has been a tendency to consider the buildings at the Cape in isolation as a style in its own right, the so called "Cape Dutch Style", on the assumption that every country is entitled to its own architectural tradition and that every such tradition is the product of indigenous evolution (Biermann, 1960:24).

Fagan's career has, over the last sixty years, moved seamlessly between conservation and new work, the former providing valuable constructional and historical knowledge and the latter new inspiration. He has successfully mediated the dialectics of conservation and preservation and imitative and inventive design approaches.

6.5. Balance – a healthy mind and a healthy body

Now although [I have] remained passionate about Architecture (that is why we still go to the office every day) my other interests have given me a lot of pleasure, because I have also pursued them with intensity (Fagan, 2002b:2).

Two non-architectural pursuits have remained dominant in Fagan's life to this day: firstly sport and secondly, music and an appreciation of the arts.

6.5.1. Sailing

Sailing is Fagan's favourite sport (Fagan, 1988:1). But Fagan notes (1983d:1) that winning is not everything.

Simply because I do not regard myself as a champion or a winner at my favourite sport of sailing, in the sense of winning at all costs ... [rather that] enjoyment of the sport is the primary consideration (Fagan, 1983c:1).



Figure 6.32. Fagan and his yacht *Suidoos* which is still moored in the yacht basin of Cape Town's harbour (Author, 2010).

In preceding chapters it has been noted that the experiences of flying and sailing have heightened Fagan's contextual sensibilities and practical approach. After Fagan left the Cape his sailing exploits diminished, but he did build a canoe for his children that they used on the river near their Pretoria farm. He later purchased a Loch Fyne 3-in-1 dingy which the family sailed on the Pienaarsriver Dam (Fagan, H., 2005:2).

Fagan took his love of sport to new levels through his international sailing exploits. He bought a yacht Westwind from Fred Smithers and renamed the 12,1m sloop Suidoos (South East)¹⁸⁵ after a few conversions. Fred had taken Westwind on its first South Atlantic race in 1971, Fagan completing the same voyage in 1973 and 1976. On its fourth journey in 1982 Fagan was the winner of in his class in the Transatlantic Yacht Race from Cape Town to Bahia in Uruguay ending 3rd overall. In recognition of this achievement he received a national sporting award from the then South African President Marais Viljoen (1915–2007). But Fagan notes that it is not the winning of trophies that is important to him but the close contact with nature. The 1982 race was the first in which satellite navigation could be used but Fagan refused to employ the sophisticated system, preferring to use traditionally proven methods to maintain close contact with the elements (Anon, 1982:46).

I fully agree that satellite navigation, and especially now GPS are amazing all weather aids. But if they completely displace traditional celestial navigation, we have lost yet another link with nature. For we then place dependence on a man-made system and sever our contact with the heavenly systems – the sun, the moon and the stars – that have ruled men's lives since the beginning of time (Fagan, 1992b:2).

Fagan also exerts the same control over the yacht races as he does in his office. His daughter Helena, her brother Hennie and a young medical student accompanied him on the 1973 Cape to Rio race. She recalls (2009) that her father "respected Hennie's opinion regarding the navigational and tactical decisions and argued and discussed everything with him first, but would always give the final orders". Fagan has also made the epic journey from Portugal to Mossel Bay in a replica caravel to celebrate the 500th anniversary of Dias's arrival in the Cape in 1488 (Fagan, H., 2005:2). The vessel is now housed in the Mossel Bay museum, one of Fagan's most important restoration projects.

6.5.2. Music

The Fagans were a musical family. My father's uncle Gideon qualified as a composer and conductor at the Royal College of Music in London and became involved in theatre music and [was] conductor of the BBC from 1939 to 1942. He then became the

– ¹⁸⁵ This name reflects the famous and incredibly powerful south-east wind that in summer draws a 'table cloth' of clouds over Table Mountain in Cape Town.

assistant conductor of the newly formed Johannesburg City Orchestra till its disbandment in 1952 when he became director of the SABC music department where he was involved for the next ten years. After retiring to Rondebosch, he taught conducting, orchestration and composition at the SA College of Music for the next five years till he settled in Betty's Bay where he carried on working on his own compositions. Gideon's two elder sisters also qualified at the Royal Academy as music teachers and their younger brother, Johannes, was regarded to be the most promising South African composer of his time when he committed suicide as result of the sudden death of his fiancé in 1920 (Fagan, H. E. 2005:5).

Music has continued to play an important role in Fagan's family life through his inherited ability to play the piano and a learned affinity for the guitar. He has passed the gift of music and the dedication necessary to perform to all of his children who have learnt to play a musical instrument. Many an evening has been spent on the 'dining room stage' in Die Es performing for Fagan and his wife. Fagan's son Henry (2009) recalls that the family group also won an eisteddfod. A family photograph shows the close bond developed through this pursuit. One of Fagan's daughters, Helena, who started a career in architecture, switched over to music, focusing on the clarinet. But it seems as if the days of performing 'professionally' were over as Fagan's all-consuming dedication to his profession limited the pursuit of music to a family hobby.



Figure 6.33. The 'sound of music' at the Fagan home. c.1966 (Fagan archive, undated).

6.6. The man

Fagan is “a reserved, thoughtful, courteous man with a wry sense of humour” (Anon, 1991:15). One of Fagan's most long-standing employees, John Wilson-Harris, (2012) notes that "Fagan is not an

outgoing boisterous soul but he has a keen sense of humour and has great wit. I think it is partly this intelligent humour rather than gratuitous confidence, so often found in successful designers, that has allowed the design solutions that differentiate Fagan's buildings from others". The limerick below gives some insight into the mischievous side of Fagan's personality and his ability to manipulate language as well as he does architecture!

"The captain of this lugger
He was a foul old bugger!
He wasn't fit to shove a shit "

but this is where my wife said she didn't think this particular sea ballad suitable, since many yachtsmen were now in fact yachtswomen! Then I thought of;

"I must go down to the V&A
To old Bertie's pub on the quay
And all I ask are some tall beers
And a girl to drive home for me" (Fagan, 1992b:1).

Fagan is a small man with a very large and powerful handshake. His stature belies his physical strength no doubt honed through years of sailing and other physical activity. He is incredibly fit and there have been no major concerns about his health save for an ailment that befalls most men later in their life. He shuffles slightly now, struggles to hear at times and relies on his wife to remind him about events of the past. He is "generally easy going, patient and even tempered" (Meintjies, 2012:1), but makes his feelings known when he is upset. Ex staff members such as Lourens (2008), Dodds (2009) and Serritslev (2009) have commented that he would never vent his anger in front of a client or builder but would later let everyone in the office know how he felt about a particular situation. His daughter Helena recalls (2009) Fagan's temperament.

We did not dare put a foot wrong. He was a very loving father but could get extremely angry. As little kids he would scream the car to a halt, throw us out of the car and make us walk home. There were times when poor Ma could not talk to him for days. But he taught us self-discipline and to aim for the best. Mediocre was not acceptable.

His unassuming persona is both welcoming and disconcerting. He listens intently to conversation, contributing only when necessary but making pointed, intelligent and often cutting remarks. He is vehement when he disagrees with a point of view and can argue a point convincingly. He is certainly strong minded and as Meintjies (2012) notes when commenting on their days together at Volkskas, "although open to debate and discussion, Gawie was always in design control, knew what he wanted and usually got it". This has been confirmed by Fagan's most longstanding employee Moira Serritslev (2009) who notes that although various tasks have to be performed by different staff members, Fagan makes all the decisions.

At eighty-six years old Fagan still works an eight-hour day. He, his wife and their black toy poodle arrive at 8 am in the morning, before all the staff have arrived, from their parking space in front of the old store doors, entering the restored triple storey grain house at the working level (Serritslev, 2009) (see Fig. 6.34). The left-handed Fagan sits at his desk at the head of the stair looking down on his secretary Rozelle and even farther down to the entrance stairs and front door on Bree Street (see Fig. 6.34). The Heath Robinson door closer, comprised of a stretchable rope tied to a hook, is a testament to Fagan's *boer maak 'n plan* attitude. At 1 pm Fagan and his wife leave in their car to have lunch, usually at the Royal Cape Yacht Club¹⁸⁶ in the harbour preferring to have their main meal at this time of the day (Serritslev, 2009). They return after their daily sojourn with a customary "doggie bag" and, with a higher pitched voice, Fagan lovingly dishes out morsels to his pet that retires to its basket at the feet of his wife. But this unassuming looking dog aggressively barks at any newcomer that may venture up the stairs, caringly protecting its owners.



Figure 6.34. **Top left:** Basement of 156 Bree Street. A partly completed plane can be seen in the background. **Top right:** The steep open tread wooden staircase leading from Bree Street to the reception area. **Bottom left:** Façade of the old grain store now Fagan's office. **Bottom right:** Reception area with piano to the left and boardroom behind the mustard coloured curtains. (All Author, 2009).

An office ritual is cake and tea on a Friday morning, when all the staff get together. On these and

– ¹⁸⁶ Fagan has always been loyal to one or another restaurant over the years, preferring to frequent a chosen location for quite a while.

other mornings of the week the gathering is called together by the office assistant Bridget's tea bell. The office is usually vacated at around 5.30 pm, after the traffic has subsided (Serritslev, 2009), and Fagan makes his customary rounds to check that doors are locked and windows closed. They return home on the scenic drive to Camps Bay where Fagan reads and often walks the dogs in the nearby nature reserve. The well-worn books in Fagan's library are a testament to his prolific reading skills. The author also witnessed him devouring a modern architecture book at Paradys in 2009. He often uses little note pages for writing comments on important issues.

Fagan and his wife have both admitted that they are not very socially inclined, preferring to stay at home and read or listen to music. Fagan prefers one on one conversations with someone who has something interesting to say (Serritslev, 2009), and in this situation he is very giving and easy to commune with.

6.7. Summary

Fagan's childhood experiences laid the foundation for a thorough interrogation and understanding of context. He developed an appreciation of the earth and its qualities through his tunnelling exploits in the garden, the building of shelters and the moulding of mud and clay. Initial gliding forays sensitised Fagan to the effects of air, while boating and sailing synthesised the effects of air and water on the human body. These influences allowed Fagan to develop an inventive attitude that, as time progressed, was honed into an intuitive ability to manipulate all things technological and respond to all contextual influences. Hand and mind were developed equally while natural talents seamlessly combined with creative nurturing from parents, family and friends.

Fagan's engineering training built on his natural abilities but was limiting as a creative outlet. Music, maidens and motorbikes filled this gap and led to musical ensembles, a long-standing relationship and inventive outputs. A Pretoria School architectural education heightened creative abilities and downplayed hobbies. Here Fagan reconciled a pragmatically focussed and mediated Modern Movement education with the requirements of place and new ways of living. He synthesised the orthodox architecture of his mentor, Le Corbusier, with the weighty place-based influences of his lecturers South and Cole-Bowen and practitioners Stauch and Eaton.

The twelve years at Volkskas Bank honed Fagan's contextually biased education through a developed appreciation of place as he travelled the country by air. He skilfully persuaded Volkskas to limit a corporate approach to bank design and opt instead for a sensitive approach to place. Throughout the rest of his career Fagan has moved seamlessly between the design of new buildings and conservation projects.

SECTION D

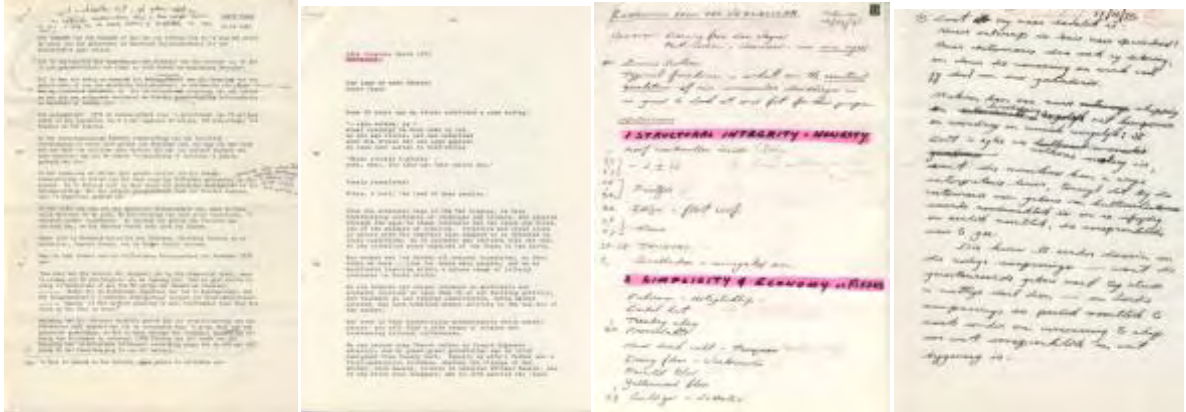
EXPRESSION

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 Tange¹⁸⁷ (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).

– ¹⁸⁷ 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 Es¹⁸⁸. 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.

— ¹⁸⁸ 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 element¹⁸⁹.



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

— ¹⁸⁹ 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.

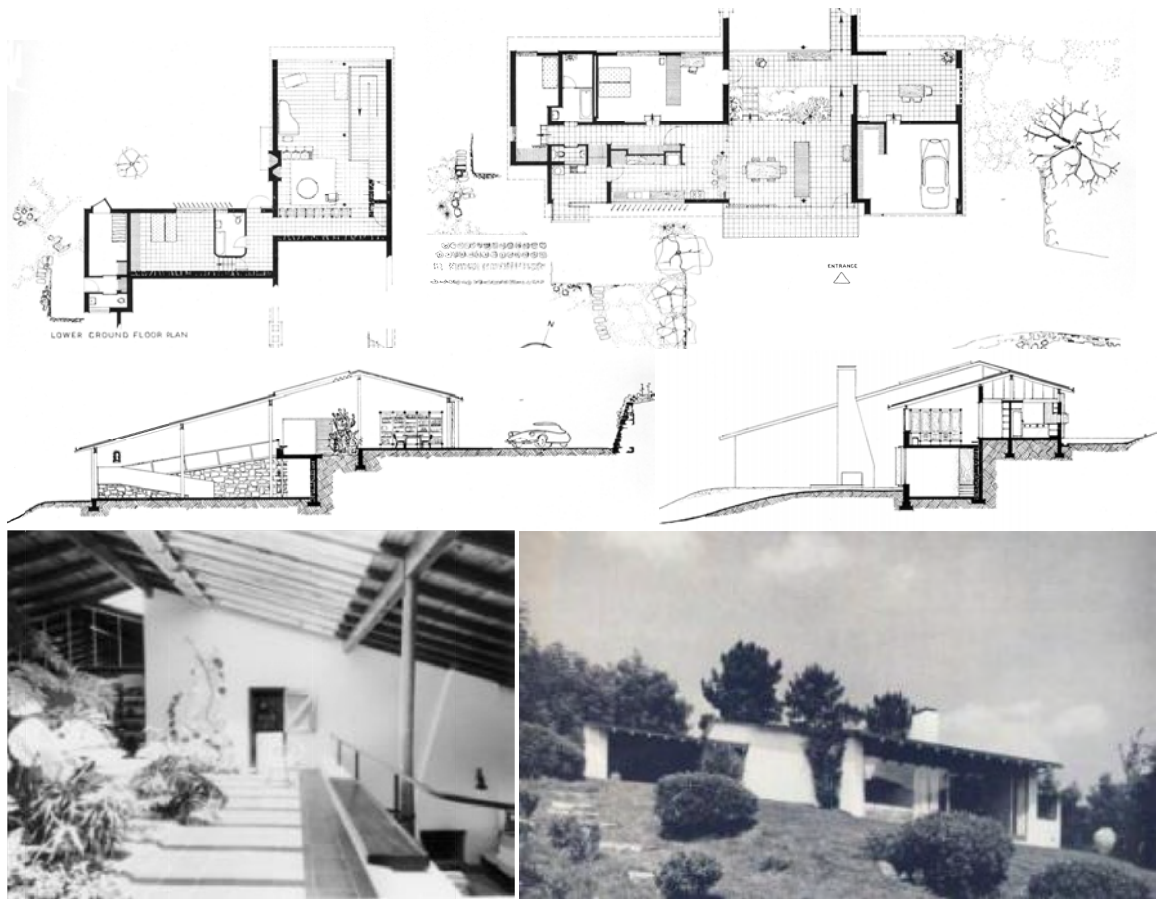


Figure 7.4. Previous page: House Keurbos (1951), Bishopscourt, Cape Town, lower ground and ground floor plans (Fagan archive). **Top:** Sections (Architect and Builder, November 1959:38). **Bottom:** inner court (Fagan archive) and view from garden (Architect and Builder, November 1959:34).

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).

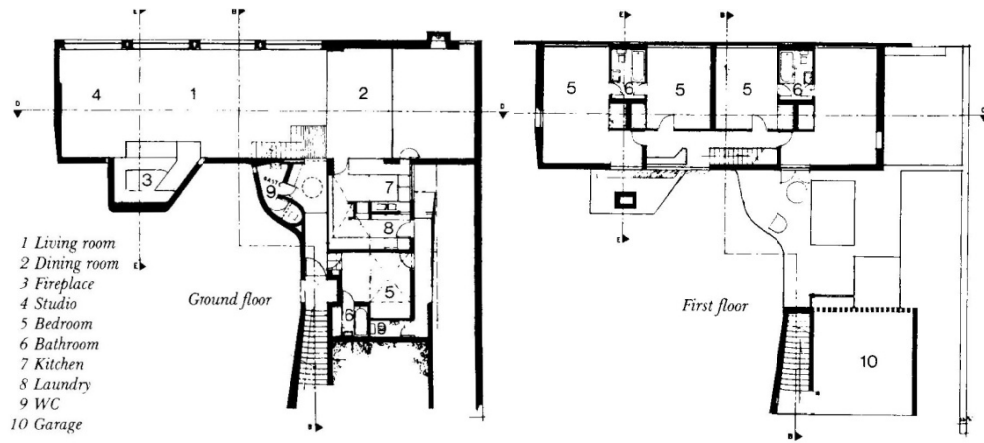


Figure 7.5. Top: Die Es (1965), Camps Bay, Cape Town, ground and first floor plans (Fagan archive, undated). **Bottom left:** Die Es (1965), Camps Bay, Cape Town, road view looking West (Fagan archive, undated). **Bottom right:** view from the West (Author, 2008).

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.

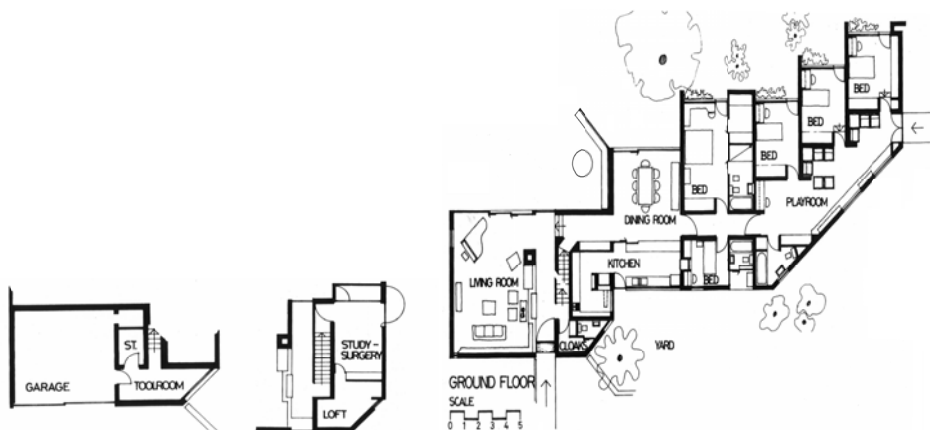




Figure 7.6. Previous page: House Raynham, Newlands, Cape Town (1967), lower ground, first and ground floor plans (Fagan archive, undated). **Top left:** Approach view (Fagan archive, undated). **Top right:** Interior view of children's playroom (Author, 2008). **Bottom:** View from garden (Author, 2008).

7.1.6 Learning from the vernacular¹⁹⁰ – ten lessons

In a lecture given in 1996 entitled “Learning from the Vernacular”¹⁹¹, 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

– ¹⁹⁰ 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.

– ¹⁹¹ 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 means¹⁹²

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

– ¹⁹² 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.

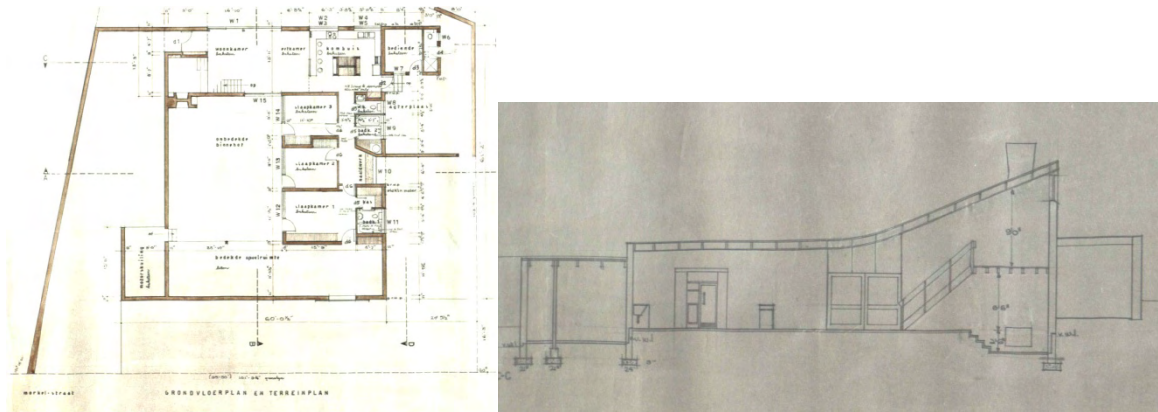


Figure 7.10. Left: Plan of House Patterson (1966) (Fagan archive - Job No. 655, undated). Right: Section through House Patterson (1966) (Fagan archive - Job No. 655, undated).

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 Guedes¹⁹³¹⁹⁴ (1925-) and a few ship-like door openings, once again to bathroom areas.

— ¹⁹³ See Appendix J.

— ¹⁹⁴ 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).

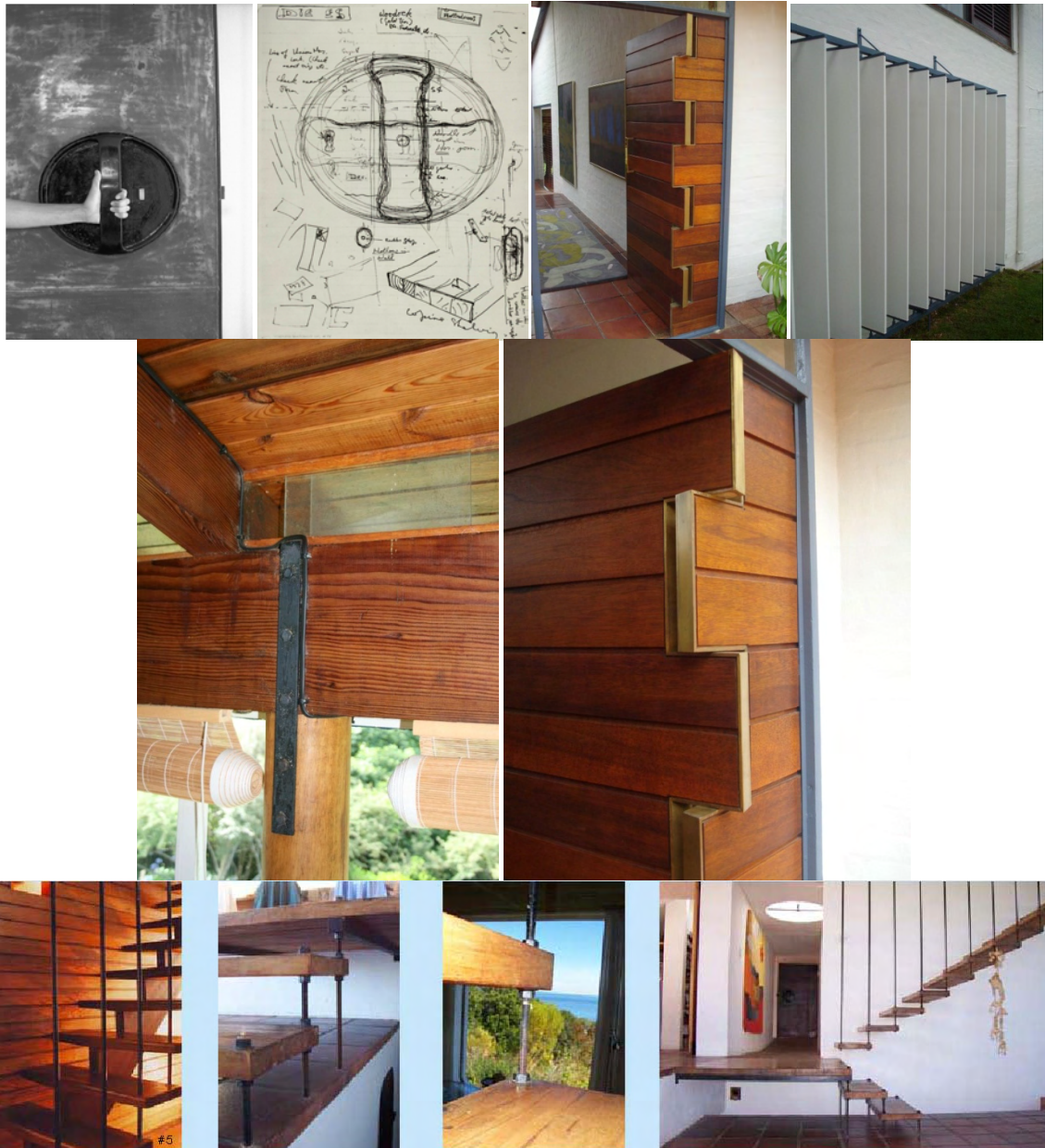


Figure 7.13. **Top left:** Front door handle to Die Es (Fagan, 2012b). **Second from top left:** Fagan sketch of front door handle (Fagan, 2012b). **Second from top right:** Front door to House Keurbos (1951) finally completed in 2008. (Author, 2009). **Top right:** Sunscreen to second bedroom at House 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 materials¹⁹⁵. 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

– ¹⁹⁵ 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 Mill¹⁹⁶ 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.

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

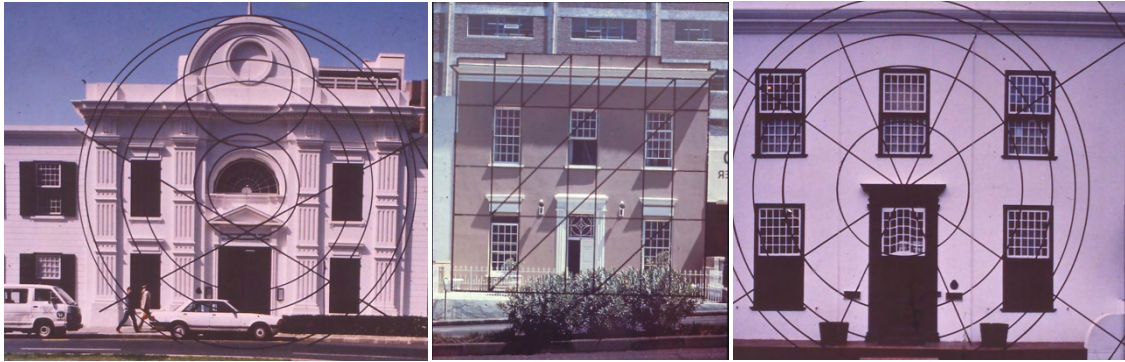


Figure 7.17. Lewcock's proportional systems placed over various Cape Town Cape Dutch buildings (Fagan after Lewcock, 2012b).

Fagan has used the Hambidge¹⁹⁷ 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).

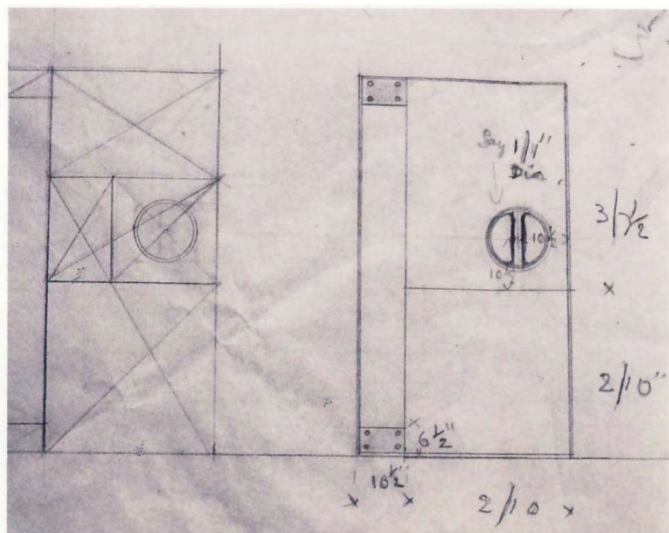


Figure 7.18. Proportional layout for door to Die Es (1965) (Fagan, 2005b:36).

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

– ¹⁹⁷ *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 Henry¹⁹⁸ 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.

— ¹⁹⁸ 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).

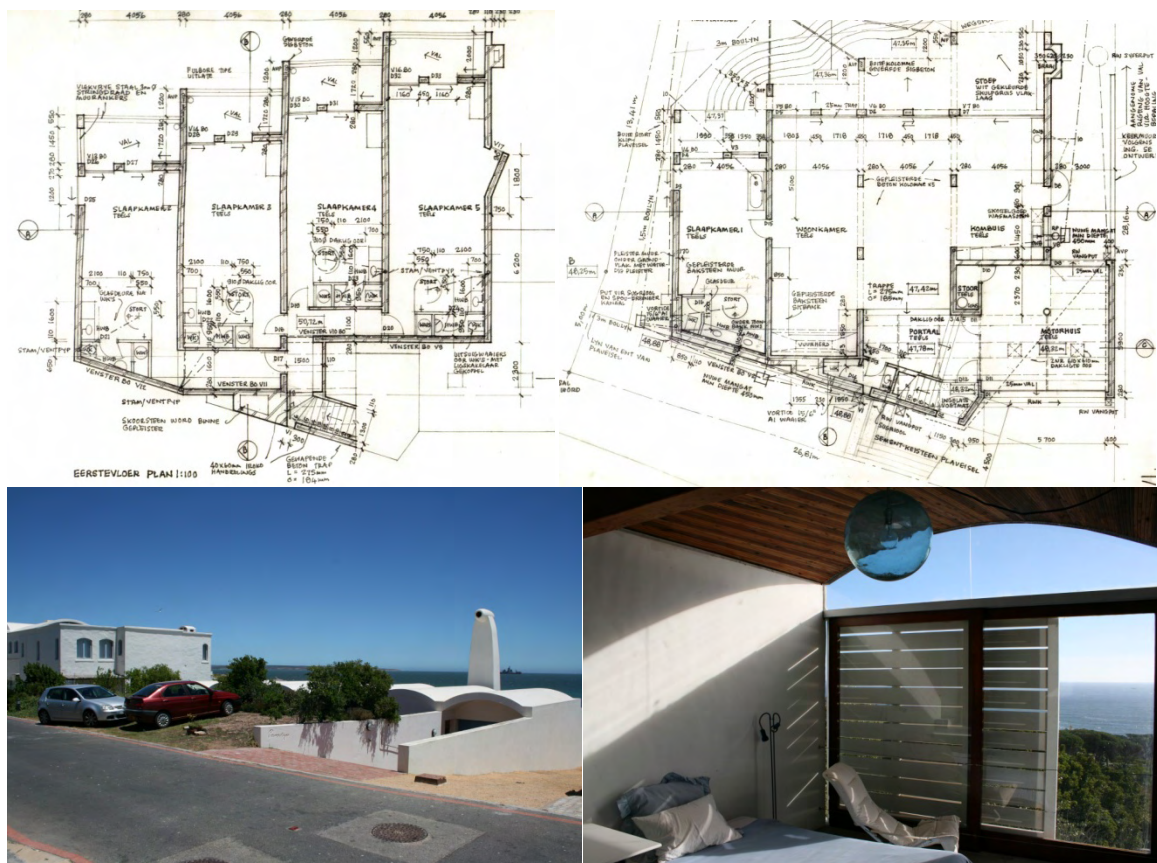


Figure 7.20. Top: First and ground floor plans of House Brink (2002) showing extent of accommodation (Fagan archive - Job No. 0206). **Bottom left:** House Paradys (2003) 'disappears' below the road (Author, 2009). **Bottom right:** Southern Bedroom at Die Es with its high level views to the sky and 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 Constantia¹⁹⁹ 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

– ¹⁹⁹ 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 Nek²⁰⁰. 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.

— ²⁰⁰ 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.

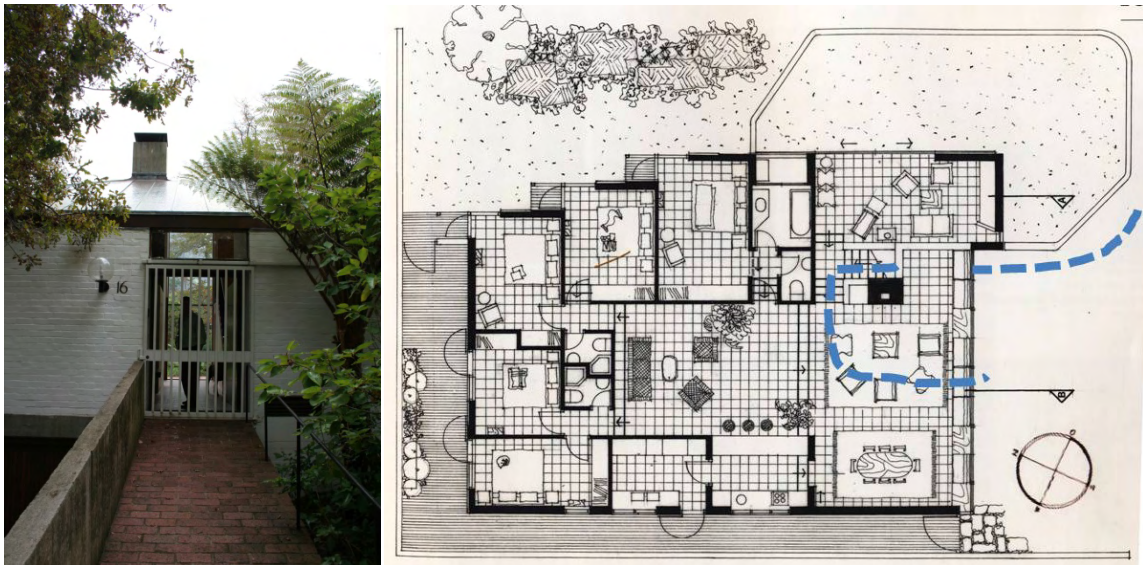


Figure 7.22. Left: Entrance way to House Raynham (1967) (Author, 2008). Right: Plan of House Swanepoel at Hermanus (1990) showing movement route that turns at 180 degrees to face the sea (Fagan, 2005a:103).

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 tendencies²⁰¹. 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

– ²⁰¹An 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).

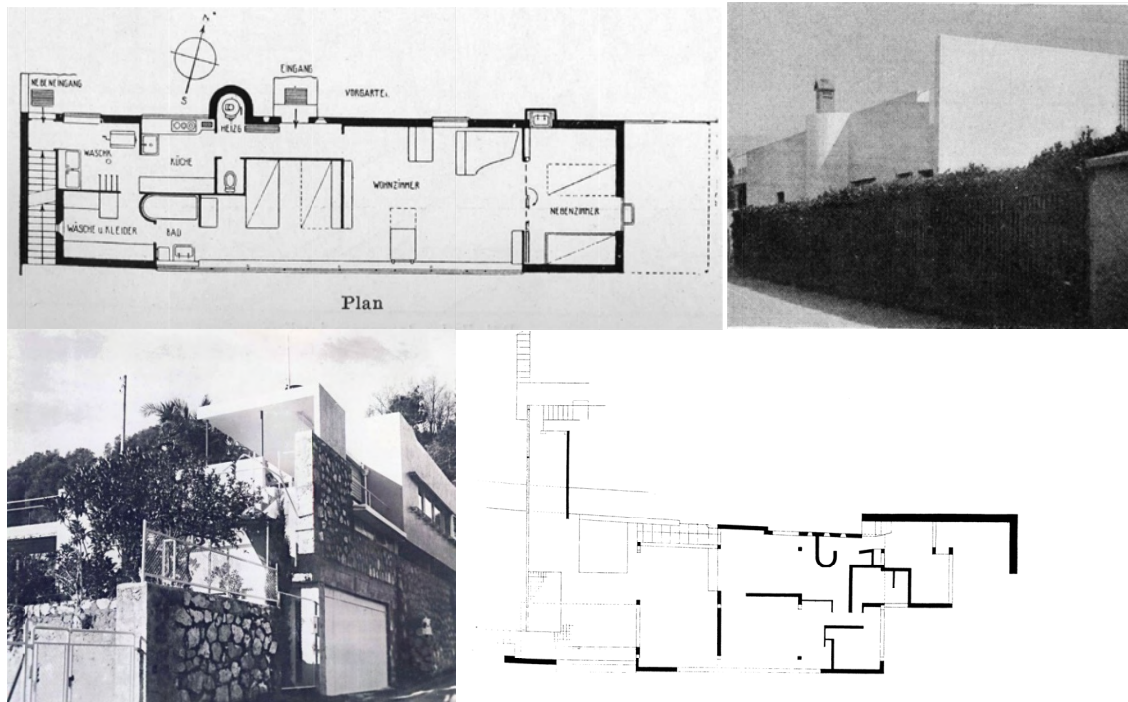


Figure 7.24. Top: Le Corbusier's Petite Villa Au Bord Du Lac Léman of 1925, plan and elevation (Corbusier & Jeanneret, 1943:74). Bottom left: Street view of Eileen Gray's Tempe à Pailla (1932-4) (Constant, 2007:147). Right: Plan of Tempe à Pailla (Constant, 2007:153).

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 Eaton²⁰². 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)²⁰³ describes Fagan's architecture as a flexible 'other' modernity which recalls Colin St. John Wilson's definition of the architecture of Alvar Aalto, Hugo Haring²⁰⁴ (1882-1958),

– ²⁰² 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.

– ²⁰³ 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.

– ²⁰⁴ See Appendix J.

Hans Scharoun²⁰⁵ (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*²⁰⁶. It is also reflective through its expression of Modern Movement 'image'²⁰⁷ 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

– ²⁰⁵ See Appendix J.

– ²⁰⁶ See Fagan's response to regionalism hereafter.

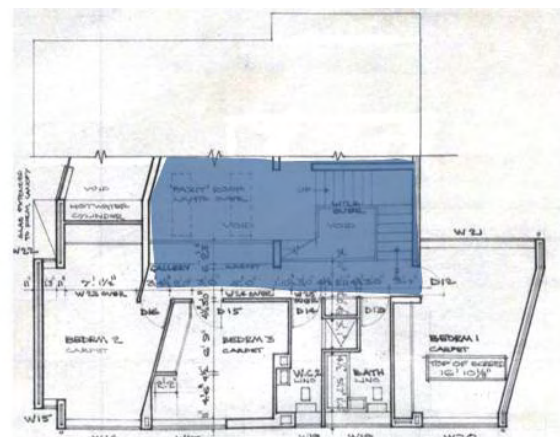
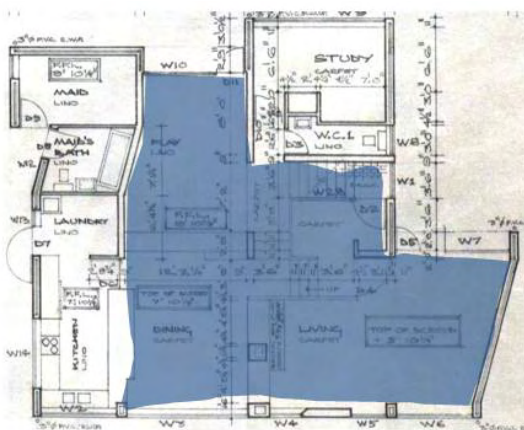
– ²⁰⁷ These can be described as Le Corbusier's canonic intentions that are broader than the mere formalism of his five point plan.

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.



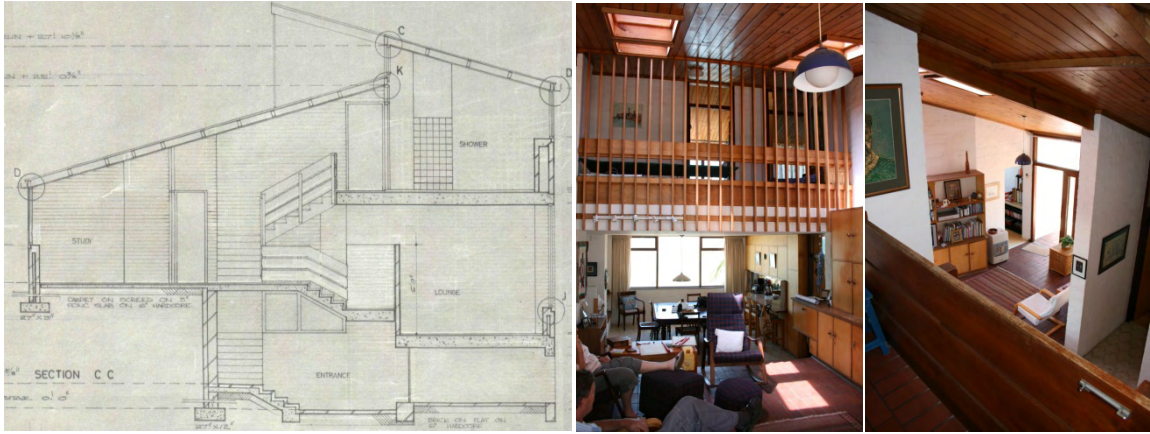


Figure 7.25. Previous page: First and second floor plans of House Levin (1969) with blue areas demarcating open plan space (Fagan archive - Job No.6910, 24/07/1969 and amended by Author). **Left:** Section through House Levin (1969) showing balance of open and closed spaces (Fagan archive - Job No. 6910). **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 cramped²⁰⁸. Fagan often internalises bathrooms to allow other spaces to gain views and light²⁰⁹, but this configuration and size reduction in Houses Swanepoel in Hermanus (1990) and Beyers in Betty's Bay (1998) lead to uncomfortable arrangements²¹⁰. 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.

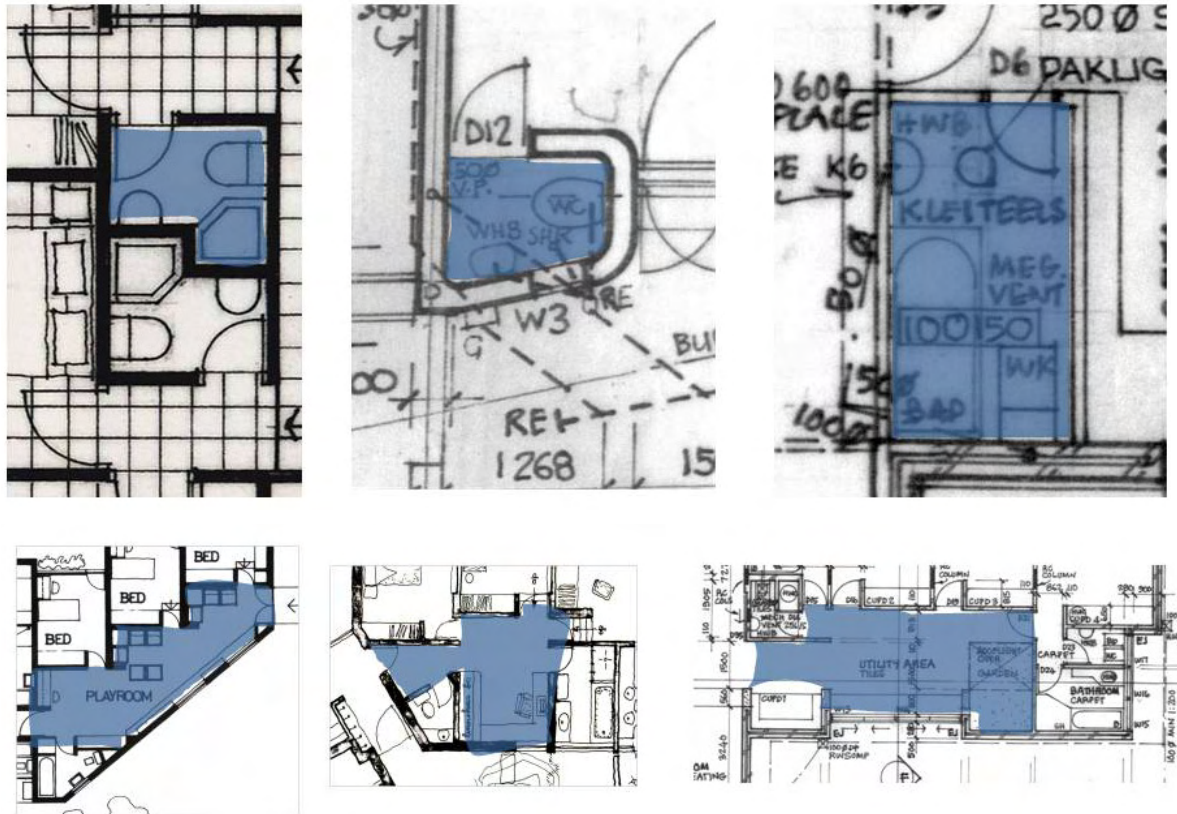


Figure 7.26. Top: Part plans of bathrooms (highlighted in blue) to House Swanepoel at Cape St. Francis(1980) (Fagan, 2005a:103), House Paradys (2003) (Fagan archive - Job No. 0204, 06/02/02) and House Beyers (1998) (Fagan archive - Job No. 9813, 03/11/1998). **Bottom:** Part plans of 'passage' spaces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

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

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

– ²¹⁰ 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).

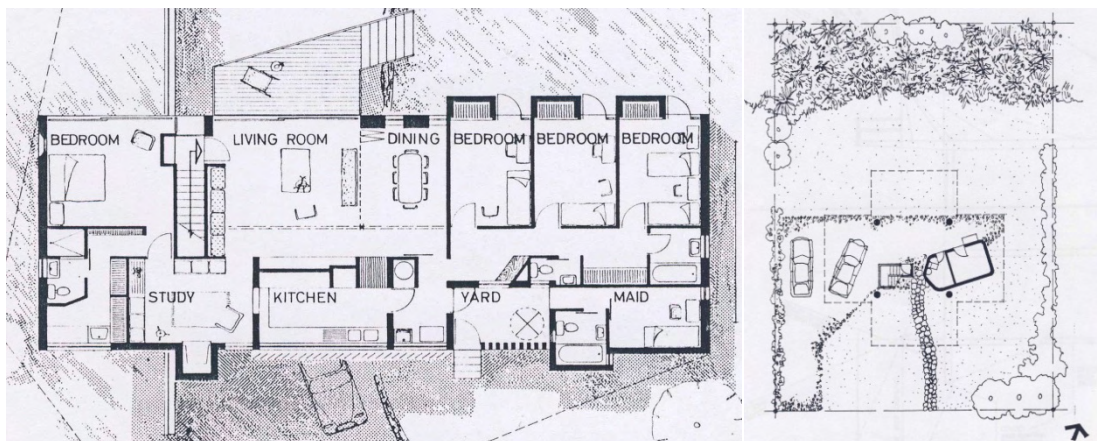




Figure 7.27. Previous page left: Plan of House Bertie Roberts (1965) (Anon, 1968:12). **Previous page right:** Ground plan of House Beyers (1998) (Fagan archive - Job No. 9813. **Left:** Concrete service beams at House Bertie-Roberts (1965) (Fagan archive - Job No. 644,undated). **Right:** Concrete columns 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 Head²¹¹ (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".

– ²¹¹ 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!).

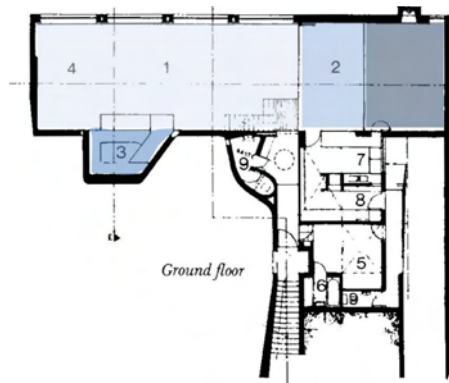


Figure 7.30. Ground floor plan of House Die Es (1965). Shades of blue indicating the various spaces within one volume which can be used independently or at once - the living area is to the left, followed by the raised dining area platform and finally the outside court (Fagan, 2005a:27 and amended by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

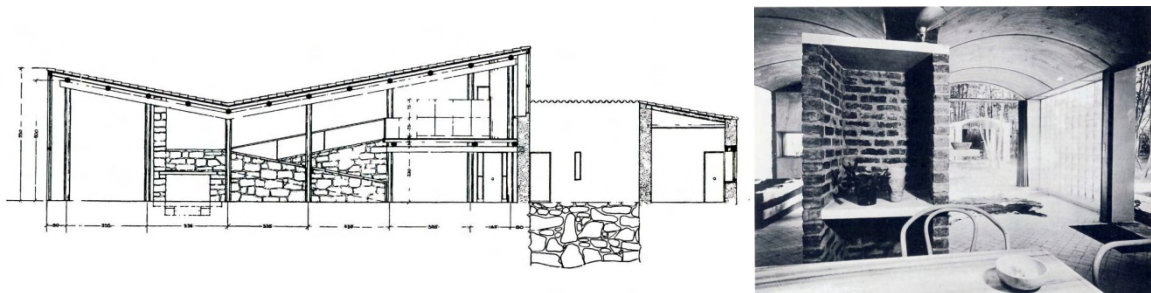


Figure 7.32. Left: Section through Le Corbusier and Jeanneret's House Errazuris in Chile (1930) (Frampton, 2001:132). Right: Interior view of Le Corbusier and Jeanneret's *Petite Maison de Weekend* (1935) (Frampton, 2001:136).

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)²¹². 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

– ²¹² 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)²¹³ 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 hull²¹⁴, 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).

– ²¹³ See Appendix E.

– ²¹⁴ 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 informed²¹⁵ 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 Heidegger²¹⁶ (1889-1976) (and later Norberg Schulz²¹⁷ (1926-2000)), and the radicalism of Paul Ricouer²¹⁸ (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),

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

– ²¹⁶ See Appendix J.

– ²¹⁷ See Appendix J.

– ²¹⁸ 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. Meiring²¹⁹. 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

– ²¹⁹ 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).

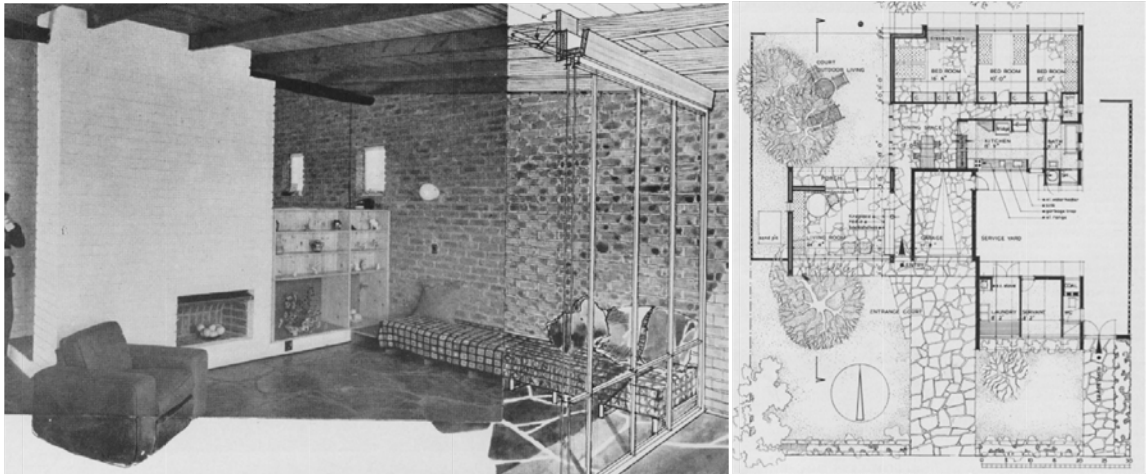


Figure 7.38. Left: Living space of Cole Bowen's Vincent House in Pretoria (1951) showing bagged and painted brickwork walls (Anon, 1953:44) and plan of House Hester in Pretoria (1950) on the right showing slate paving to living and bedroom areas (Anon, 1953:38).

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.²²⁰ (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

– ²²⁰ 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 Mumford²²¹: ‘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 extensively²²², 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.

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

– ²²² 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 landscape²²³.



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

– ²²³ 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 Gray²²⁴ (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

— ²²⁴ 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'.

Chapter 8

THE DESIGN PROCESS



Fagan design sketches: House Beyers (1998), House Swanepoel, Cape St. Francis (1980), House Paradys (2003), House Die Es (1965).

This section describes Gabriël Fagan's design process:

Design terminology will be explained and the design methodology will be described.

Fagan's design process will be contextualised and explained within the 'discipline of design'.

Reference will be made to sketches made by Fagan as well as interviews with him and former and present staff members.

The analysis and description of the design process will be guided by Fagan's lecture notes and interviews with the author.

House Swanepoel in Cape St. Francis (1980) will be used as case study as it offers the most comprehensive set of design process documentation.

8.1. RATIONALITY AND INTUITIVITY

For me creativity is, you know, finding solutions for all these things that are contrary, and the wrong type of creativity is that you just forget about the fact that sometimes it rains, you forget that sometimes there are many people, and you just make beautiful stairs from the one idea you have in your head. This is not creativity, it is fake creativity (Herzberger quoted in Lawson, 2005:153).

The description of creativity by Herzberger finds parallels in the work of Fagan through its recognition of the everyday in design. Fagan's pragmatic design approach results in contextually appropriate and functionally suitable houses, but the resultant forms are a unique synthesis of past influences and present conditions – and are the result of a distinctive design talent. Fagan's ability to reinterpret the Cape vernacular as a series of principles has allowed him to understand the value of tradition for the present condition. He has re-evaluated the functionalist canon of the Modern Movement in a similar way, and through these processes Fagan very much emulates how author and journalist Arthur Koestler identifies the psychology of the creative act (1964:119-120). He sees it as

... the displacement of attention to something not previously noted which was irrelevant in the old and is relevant in the new context; the discovery of hidden analogies as a result of the former; the bringing into consciousness of tacit axioms and habits of thought which were implied in the code and taken for granted; the uncovering of what always has been there. ... The creative act is not an act of creation in the sense of the Old Testament. It does not create something out of nothing; it uncovers, selects, re-shuffles, combines, synthesizes already existing facts, ideas, faculties, skills. The more familiar the parts, the more striking the new whole.

It is virtually impossible to completely distil any creative person's design process as it is usually a deeply personal endeavour that they are unwilling or unable to describe. Stages of the design process such as assimilation, general study, development and communication have been defined by authors such as Lawson (2005:34) in *How Designers Think: The Design Process Demystified*, but the processes that create linkages between them are difficult to assess or describe. Simply put, the creative process has, as its bookends, problems (or opportunities) and solutions. If the same problem was given to a number of architects, there is no doubt that each solution would be very different. Commonalities will certainly be present as briefs and sites present direct clues, but the differences in natural design ability, imagination and life experience of the architect will imbue the results with diverse nuances. And it is the mediation between these 'external' and 'internal' influences that create a different end result. 'External' influences are the architectural brief, site conditions, budget, available technologies and the role and involvement of the client, while 'internal' influences are generated from the designer through his education and life experiences. Papadaki's description (1950:27) of the work of Oscar Niemeyer highlights the power of imagination in the design process:

This [mediation] is not based on a simple, mechanical activity nor on an act of will; it is certainly not the result of the impulse of a talent. The slow, gradual subordination of given realities (the seemingly irreconcilable arbitrary realities of program, materials and budget) to a stronger reality of form and content, to that particular reality which is the "work" with a face and identity all its own, is not accomplished by analytical and rational operations, nor by the mediation of a system under the guidance of a given methodology. Active imagination in action with its power to associate images with a freedom, order and logic which are of its nature, continuously nourished by an inexhaustible unconscious can alone precipitate this act of transformation ("of" a reality "to" the reality) which has the appearance of the miraculous. Then, buildings acquire their own destiny; the shape they prescribe comes to life; and conflicts between container and content fade away. The event of such a new reality is always a surprising one, a welcome surprise: an image that in its turn stimulates the imagining faculties and becomes the source of a still newer series of images within man's emotional being.

8.2. DESIGN

The origin of the word design is from the Latin *designare* meaning 'to designate'. Design is both a verb and a noun. As a noun it describes the outcome of a creative process and as a verb it means the action required to arrive at a solution to a problem or to respond to opportunities. Two types of design process have been posited. The Rational Model was developed simultaneously by Simon (1916-2001)²²⁵, Pahl and Beitz (Pahl *et al*, 1996)²²⁶. It is a process-driven model that is based on rationalist philosophy and relies on the identification of constraints and the development of objectives. It consists of a number of related stages. The Action-Centric model is the counter to the rational process and can be described as an intuitive activity where designers use emotion, imagination and improvisation to design (Lawson, 2005:143). There are no identifiable stages and no perceivable sequence.

8.3. THE DESIGN PROCESS

The rational design process involves a series of stages. Designers sit at the centre of this action and act as mediators between problem and solution. The designers' tools are their influences, design talent and imagination. Lawson (2005:49) suggests that the negotiation between problem and solution is achieved through the three activities of analysis, synthesis and evaluation. These activities are generic to most rational design processes and can be expanded on as follows:

– ²²⁵ Simon and Newell's seminal work *Human problem solving* of 1972 describes the rational approach.

– ²²⁶ Paul and Beitz's rational model is based on engineering processes.

8.3.1. Initiation

A design scheme will commence, most often, with the requirements set by a client. This will not necessarily identify the problem but will establish a practical (or perhaps even a theoretical) context. The problem will be identified by the designer through an exploration of 'external' effects and 'internal' influences.

8.3.2. Preparation

Once the initial problem has been identified, or as it unfolds, a series of investigations are undertaken. This involves gathering and analyzing site and programme information, and assessing formal possibilities and technological constraints.

8.3.3. Incubation

A period of introspection often follows. Although some designers prefer to design immediately, others regard time away from the problem as an important process. This period of unconscious thought mediates conscious 'external' effects and 'internal' influences, while creating connections between often disparate design requirements. Koestler (1964:111) notes that this period is characterised by the "intervention of the unconscious".

8.3.4. Synthesis

After identification of the design problem the architect will produce options that draw together commonalities identified during preparation. These will be synergized with the designer's 'internal' influences. The extent of the power of 'internal' influences will often determine the final form, as some architects are more canonically inclined than others. In any event, previous design influences will have an impact. Drawings and models are used to mediate between idea as thought and building as reality and give expression to imaginative and creative ability. This period is also characterised by convergent and divergent thinking. Lawson (2005:143) states that

typically the convergent task requires deductive and interpolative skills to arrive at one identifiably correct answer. Convergent ability is measured by many of the conventional IQ test problems and has been associated with ability in science. The divergent task demands an open-ended approach seeking alternatives where there is no clearly correct answer.

8.3.5. Evaluation

Design solutions will be tested against the requirements of the brief and the exigencies of the site and initial design intentions. The process is a reiterative one with continuous testing and refinement of proposals. Conceptual ideas are tested through sketches and models and later developed into sketch plans.

8.3.6. Action

A final solution is chosen and documentation is drawn up to give effect to design intentions.

8.4. FAGAN'S DESIGN PROCESS

Fagan indicates (2008b) that he is 30% rational and 70% intuitive in his design process, explaining that (2012a)

... after almost 70 years in the game one builds on experience, which translates into intuitive design decisions. So to that extent I believe that the 70% intuitive is inherently rationally founded.

Fagan's design process is a complex synthesis of 'internal' and 'external' influences that is biased towards the pragmatic and the experiential and not based on any particular theoretical standpoint. This is reinforced by Fagan in his Eaton Memorial Lecture entitled "An Enabling Architecture" in which he comments on the published work of some young practitioners:

Imagine the frustration in designing even a small house for yourself if you are 'controlled by all that is being resisted, where the simple logic of binary opposites transfixes the mind with a casebook denial of suburban culture, in the best modern tradition. Once again the familiar position of heroic resistance, of unwitting conformity with the elitist subcultural leanings of my acquired education and taste culture'. Phew! The muse has obviously become incestuous, and architecture more interested in defining itself than in extending its functional dimension, than in life itself (Fagan, 1996:1).

Fagan's design process is no different to that of most architects. However, he mediates problem and solution through a thorough investigative process and often long periods of incubation. He receives a commission, elicits a brief, visits the site, cerebrates, explores and produces. Meintjies (2012), who worked with Fagan at Volkskas and in his office in Cape Town in the 1960s, describes Fagan's design approach:

I'm not sure if I understood the process. He always started with a strong concept, often a tiny freehand sketch done sometimes while he was flying alone. He seemed able to

visualise the whole (even though his sketches were not very elegant or polished) and during later development he would often do odd developed projections, also around corners, to visualise different elements as a whole, like rather unconventional perspective sketches.

The design process is often lengthy. Many clients (Simpson (2009), Raynham (2009) and Mitchell (2009)) comment that they had to wait sometimes up to eighteen months for a proposal. Serritslev (2009) notes that "clients had to be patient" and the solution is "in his head for a very long time". It is not that Fagan struggles to design, although he (Fagan, 2010a) did admit that he was finding it difficult to come up with a solution for House Visser in Langebaan, due to problematic site conditions and extensive accommodation needs. Fagan requires detailed information before he makes any decisions and this process can take a while. Lourens (2008) explains that Fagan was once designing a handrail to the edge of a public car park and painstakingly investigated the sizes of various vehicles, the relationship of the human to the handrail and various configurations of handrail size and shape before finally making his decision.

Fagan's design process is also not a continuous one as it is interrupted by other work and prolonged periods of incubation. He confirms this (2008b) when he comments that the problem with architecture is that it is an ongoing process, laughingly commenting (2008b) that he only completed the design and construction of the front door to his parents' house Keurbos (1951) in 2008, almost sixty years after it was built. He also relates that his daughter who started studying architecture gave it up after three years, preferring the immediacy of music and audience feedback. Fagan indicates (2002a:1) that "the many joys of practicing architecture certainly do not include instant gratification". But once information is at hand and Fagan has been primed (2008b), ideas come quite quickly. Design work also often happens at home (Lourens, 2008; Serritslev, 2009; Wilson-Harris, 2009), most probably as there are fewer distractions and as design is a very private process (Fagan, 2008b). Little discussion happens with anyone else except his wife. Fagan remarks (2000b and 2008e) that design is

... usually private, but lately [I] tend to discuss with Gwen as she understands what I am trying to achieve.

Only when the idea is thoroughly conceived to quite a detailed level (Serritslev, 2008) will Fagan ask a staff member to draw it up so that further development can occur. Fagan's wife also notes (2008b) that because Fagan is becoming lazy (who wouldn't at 86?) she will often initiate a project which then jolts him into making responses and criticisms. This was confirmed by Wilson-Harris (2009).

In any project 'external' design generators are many and varied, but for Fagan the most important informants of site and program go hand-in-hand. Fagan explains (2008b) that he likes to firstly familiarise himself with the program and once this is concretised, the site and its qualities can be investigated through the drawing of proportional diagrams or "cutting pieces of paper to the right size and shuffling them around" (Wilson-Harris, 2009). Fagan (2012a) explains:

I would like to believe that my designs evolve from both an understanding of the environs, climate and site as well as specific client requirements (which they cannot always verbalise or express themselves) while also belonging to the Cape or Karoo as the case may be. This cannot be consciously applied, but must spring from an intimate knowledge of the vernacular.

This correlates with the design thinking of one of Fagan's teachers, Norman Eaton, who commented (Harrop-Allin, 1975:59):

You have a problem and you solve the problem according to its particular aspects: the requirements of your client, of building and everything else to do with that particular problem.

Quite often, important aspects gleaned from the requirements of the client guide the entire design process. House Swanepoel in Cape St. Francis (1980) is a case in point. The necessity for five bedrooms and living space all facing the sea view prompted a linear layout. The client for House Lückhoff (1981) stipulated "a timeless white uncluttered space" and was presented with a series of white painted brickwork barrel vaulted elements.

Fagan's design process is a mediation of an investigative 'first principles' approach (developed during his Pretoria education) merged with a stock of well-honed previously defined solutions for particular parts of the design problem (Serritslev, 2009). This process delivers unique solutions that are fresh in their approach but 'historical' in their expression. They are never stylistically driven and echo the approach of Eaton who stated that:

You cannot start off with preconceived ideas about what things should look like. They should shape themselves under your hands as you are solving the problems of construction, servicing, climatic conditions and so on. The idea that you start off with a preconceived idea of style, or facade, or anything else, is the death of architecture. These things have nothing to do with architecture at all (Harrop-Allin, 1975:59)

Fagan questions the requirements of each space or element, rethinking approaches and "putting away preconceived ideas" (Wilson-Harris, 2009). Ideas are important for Fagan and usually framed in spatial terms and informed in most cases by aspects of the natural environment. They are developed from a detailed understanding of the site and programme. House Raynham (1967) is orientated around the nearby mountain, while Die Es (1965) is formed by the architectural promenade that guides the visitor from distant to framed sea views, and links mountain and ocean. House Swanepoel in Cape St. Francis (1980) straddles the dunes and connects to the ocean through views, while Paradys (2003) merges with the ground and focuses linearly on the ocean. Here direct linkages to earth and water cement Fagan's lifelong contextual influences. The entrance and main circulation route in House Blommaert (1982) orientate the visitor towards Table Mountain, while House Bertie-Roberts (1966) connects to Lion's Head (Fagan, c. 1985:12).

'Internal' influences are brought to bear on all Fagan's house designs. The principles of the Cape vernacular, such as 'plastic expression' and the 'architectural promenade', are the main drivers of new design. He notes (1985:4) that

... possibly, influences were absorbed rather than consciously expressed and analyzing them now could miss the mark (Fagan, 1985:4).

Fagan's design approach is regionally inclined but there are no pedantic climatic responses such as northerly orientations for living spaces, Fagan preferring to connect to nature through view and mediate climatic concerns by other means. At Die Es (1965), solar gain problems due to a west-facing sea orientation were mitigated by sliding shutters and thermal mass in the thick concrete floors and western wall.

Fagan's design process roughly aligns with the generic creative process defined by Simon, Pahl and Beitz (1996) and Lawson (2005).

8.4.1. Initiation

Consider now the Swanepoel house in Hermanus. As with all clients, Gawie Fagan insisted that the Swanepoels record their preference in writing. He further insisted that they do not subsequently modify their demand because of the sympathy they feel for the difficulties an architect would face in meeting them. This is a rare example of professional probity, as we all know that today most architects feel that their clients often demand the impossible (Pretorius & Raman, 2006:14).

In the early part of his career Fagan meticulously reframed or minuted briefs on office notepaper. Later they were hand-written, often by his wife. His main clients over the years, the Swanepoels, have always presented Fagan with a beautifully hand-written brief with an accommodation schedule and a description of "aesthetic preferences" and "feeling and atmosphere". This clarity has, on the one hand, provided Fagan with powerful ideas but, on the other, the restrictive nature of client requirements has not deterred him from bringing his own influences to bear on the design process. As will be described next, Fagan prefers to be well briefed before any design work can commence.

8.4.2. Preparation

After thoroughly familiarising myself with the program, I spend as much time as possible on the site under different conditions (Fagan, 2008e).

Fagan attempts to "get the basics right" as the rest will fall into place (Lourens, 2008). His

preparatory work is crucial in establishing the ground rules for the design and his quote reiterates the standpoints of his lecturers such as Cole Bowen and Stauch (Nation, 2001).

8.4.2.1. The program

The briefs for the two houses designed for the Swanepoel family (1980 and 1990) are very clear in content and intention. Fagan's wife remembers (2008d) that Montu Swanepoel was an artist who knew what she wanted and also required clear explanations as to what was being designed. Fagan is, however, selective about what to use and what to reject from a client brief. In House Swanepoel in Hermanus (1980) the client states that "bedrooms can possibly open to inner atrium space" but also that "a feeling of spaciousness be achieved with light structures and floating planes". The clients got their atrium space but the stereotomic solidity of the Cape tradition took precedence over a light approach to form making. Meintjies (2012) writes that Fagan always

... knew what he wanted and there was never any compromise. Absolutely admirable but which sometimes caused client unhappiness (Meintjies, 2012).

Although Fagan knows what he wants he is not dogmatic in his approach and a close reading of archived briefs reveals a close subscription to client requirements. It is through technological and aesthetic treatment that Fagan brings his own internal influences to bear. But he also layers his interpretation of his 'mentor', as seen in his quote from Le Corbusier's *New architecture of 1927*:

Let us state the problem: A house: A shelter against heat, cold, rain, thieves and the inquisitive. A receptacle for light and sun. A certain number of cells appropriated to cooking, work, and personal life. A room: A surface over which one can walk with ease, a bed on which to stretch yourself, a chair in which to rest or a work-table, receptacles in which each thing can be put at once in its right place. Such are the Standards of the Dwelling (Fagan, 1969:2).

For House Swanepoel in Cape St. Francis, the client requests "integration with the environment if possible" and "shutters for security and air ventilation". Montu also remarks that a separate main bedroom away from the children would be an advantage. The brief was less prescriptive than that for the Hermanus house and a small note to Fagan indicates that it is "now over to you". Fagan does, however, manage to bring his 'internal' influences to bear on the strict program and limitations of aesthetic guidelines.

Fagan articulates his understanding of the program through sketches of room sizes and relationships in an ordered manner. The resultant 'bubble' diagrams such as for House Auldearn (1992) (see Fig. 8.1) are drawn in proportion, displaying functional relationships with other spaces, with solar orientation requirements in mind and with detailed room sizes. These sketches also provide a total floor area.

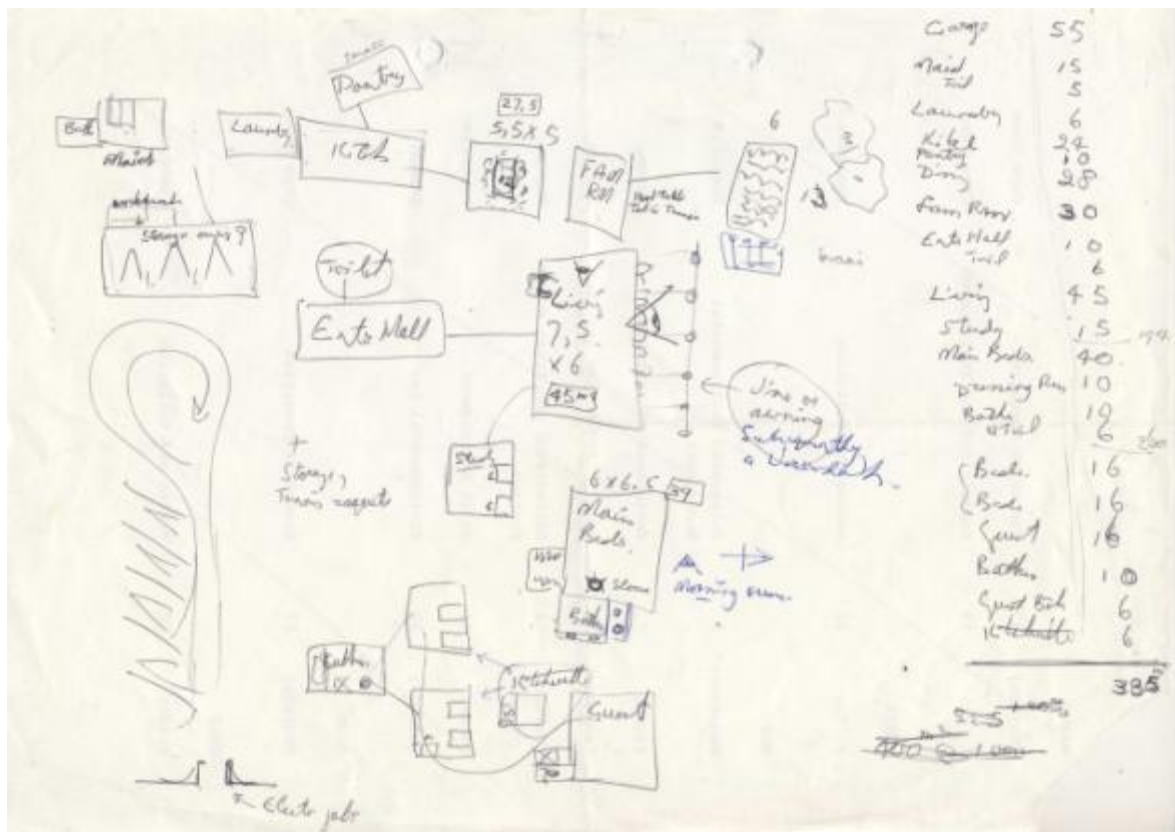


Figure 8.1. Fagan's organizational layout for accommodation for House Auldearn (1992) (Fagan archive, job no.9302, undated).

The influences of functional planning can be traced back to the organizations of Le Corbusier and later through the organized planning of lecturers such as Stauch and Cole Bowen. Fagan cites Le Corbusier's philosophy in his 1969 lecture entitled "Architecture and your home":

When a thing responds to a need, it is not (necessarily) beautiful; it satisfies only one part of our mind, the primary part, without which there is no possibility of rich satisfactions; let us recover the right order of events. Architecture has another meaning and other ends to pursue than showing construction and responding to needs (and by needs I mean utility, comfort and practical arrangement) (Fagan, 1969:5).

8.4.2.2. The site

Sketches by Fagan demonstrate a clear approach to the collection of site information. They merge a rational site investigation, through measurement, with a more intuitive analysis of context through observation. John Wilson-Harris (2012) notes that

[t]he north point – As far as Fagan is concerned, this is one of the most important symbols on a drawing and it encapsulates his awareness of designing with the elements. The other essential device, which I had not seen until I joined the practice, is a drawing made up of concentric circles with each circle being a degree of elevation and the plotted points around the circles being the direction of certain important

landscape points. This gives an accurate indication of where important views are and how high or low their elevation is on the same drawing, again reinforcing the importance of context in design.

Fagan's engineering training proves useful as he takes levels both horizontally and vertically and plots outlines of landscape features which are later superimposed on plans (see Fig. 8.2).

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).

Lately the surveys seem to include site levels only as Fagan has probably developed an intuitive sense concerning the effects of the vertical dimension. Sketches for House Van Zyl (unbuilt, 2007) (see Fig. 8.2) demonstrate Fagan's detailed site surveys and associated comments. Fagan (1969:4) stresses the importance of a contextual response:

... a modern house taking account of site, views, sun, access and specific requirements of the owners, [is] bound to be a personal statement.

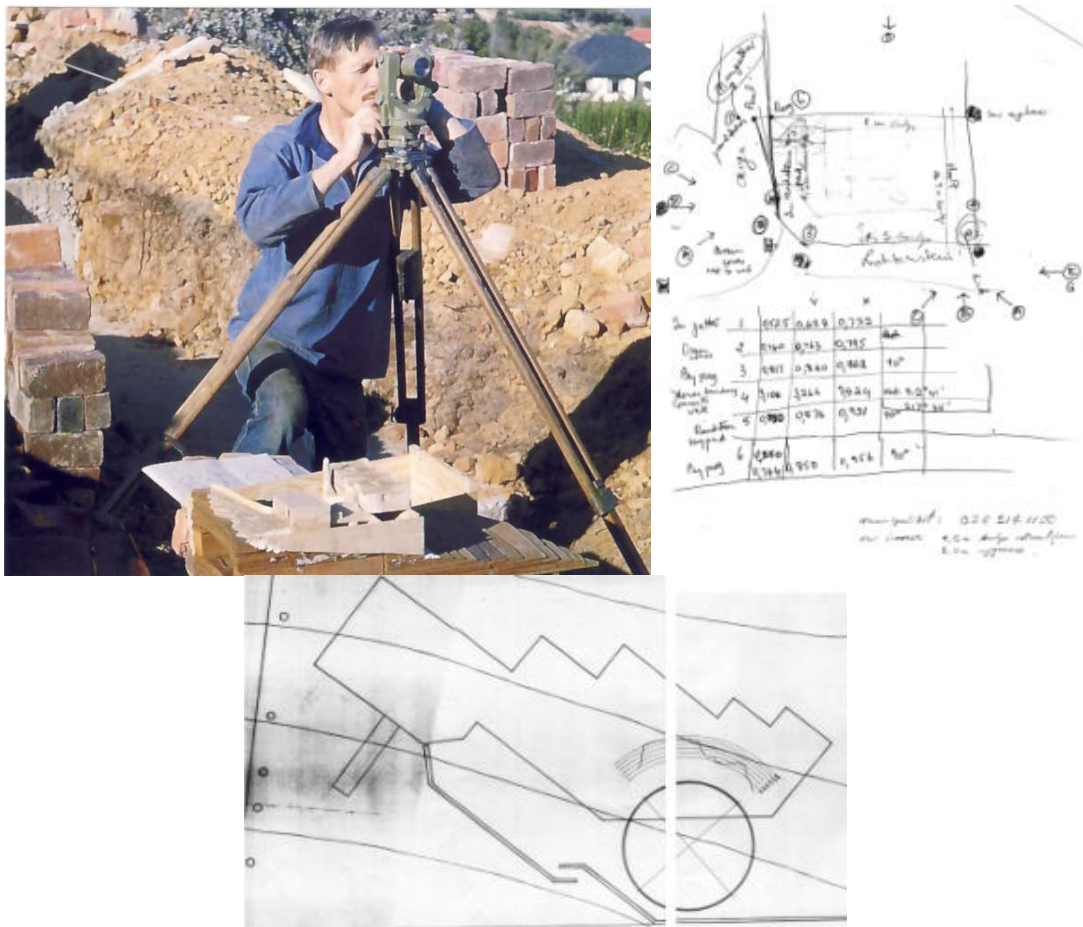


Figure 8.2. Top left: Fagan taking levels with his theodolite at Die Es. Note the model in the foreground (Fagan 2005a:28). **Top right:** Fagan's site notes and levels for the unbuilt House Van Zyl (2007) (Fagan archive - Job No. 0701, undated). **Bottom:** Site layout of House Raynham (1967) with mountain profile superimposed (Fagan archive - Job No. 695, undated).

House Raynham (1967) was designed with this information at hand so that Fagan could accurately locate the central entry on an axis with Table Mountain (see Fig. 8.2). Fagan also makes a more intuitive study by sketching contextual influences from and onto the site. The clients for House Auldearn explain (2009) that Fagan spent many hours visiting their site in Elgin at different times to assess the climate and topography. Fortunately Fagan's daughter, Jessie, owns the adjoining farm and he could visit often at his leisure.

8.4.3. Incubation

Wilson-Harris (2009) explains that Fagan's design process is characterised by periods of 'lying in the bath' when unconscious thought provokes possibilities which are then tested. Lourens (2008) indicates that Fagan's design process is "slow to start" but that a "thorough and considered approach" is taken to the gathering of information. Fagan (2008b) notes that he will often "doze on a problem before going to sleep just as his father had over sonnets he wrote".

But the time taken to conceptualise a project varies from client to client and site to site. Although some clients like Mitchell (2009), Simpson (2009) and Raynham (2009) have indicated that the design process took a long time, others make no mention of the time frame. An initial client letter for House Auldearn is dated 12 February 1991 and a non-acceptance tender letter is dated 19 August 1993. A client letter indicates a preference for construction to begin in April 1992 and finish by February 1993, but construction drawings are dated March 1993, so on all accounts the process, from inception to start of construction, took about two and a half years. House Fagan in McGregor (2005) (see Fig. 8.3) was initiated with a client meeting in February 2005, with a sketch plan produced within seven months. Unfortunately few sketches are dated so it is difficult to gauge exactly how long the incubation process took for each building.

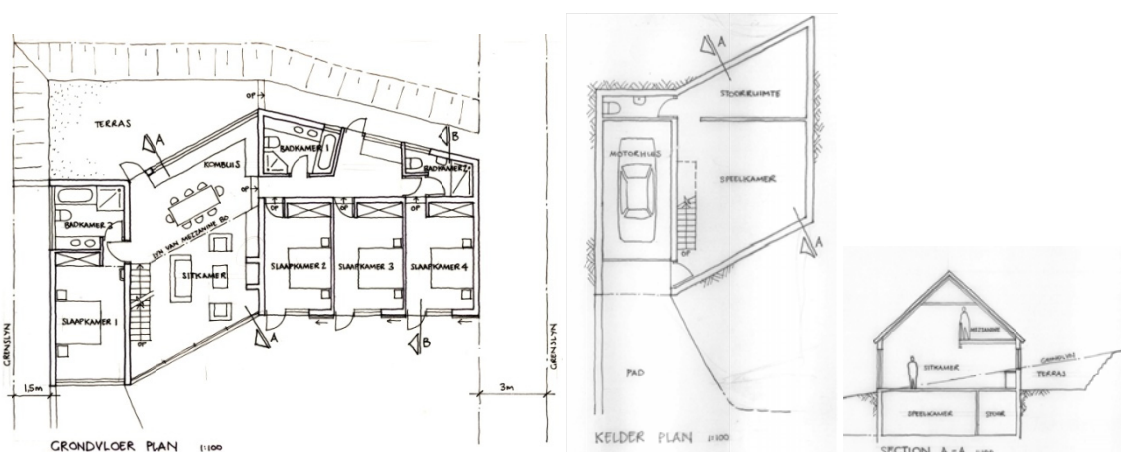


Figure 8.3. House Fagan in McGregor (2005). **Left:** Ground floor plan. **Middle:** Lower ground floor plan. **Right:** Section (all Fagan archive - Job No. 0507, 23/09/2005).

8.4.4. Synthesis: The making of the proposal (Programme and context / Form and technology)

[I] do thumbnail sketches on small pieces of paper that I always carry in my shirt-pocket. I lay great store by the small sketches, and will even scale them, because they show the essence without being distracted by detail (Fagan, 2008e).

Fagan explains (2008e) that the thumbnail sketch was an important part of his University of Pretoria training. It has certainly had a huge impact on his design process. He indicates (2008b) that he puts a lot of confidence in the sketch, which in the case of Die Es (1965) was scaled directly to get the proportions correct, as these aspects are often lost when making more accurate drawings. "Ideas can become attenuated and emasculated if this is not done. The initial 'kick' is lost" (Fagan, 2008b).

The Raynhams (2009) relate that Fagan presented them with a small sketch for the house that he had done while attending a symphony concert quite soon after their first meeting. Fagan explains (2008b) that he designed his own house on the proverbial back of a cigarette box while flying back to Cape Town. The project file for House Beyers (1998) contains six A4 sized pages (see Fig. 8.4) with minute sketches²²⁷ no bigger than a centimetre square. Houses Swanepoel in Cape St. Francis (1980) and Hermanus (1991) were conceived in a similar way, with an exploration of form in three dimensions from a bird's eye perspective. As Fagan explains, "one has to think three dimensionally" (Fagan, 2008b). These sketches are interspersed with fine plan drawings but very little two dimensional exploration seems to happen at this stage. It is only once the overall idea, through developed thumbnail sketches, has been fixed that plans are drawn to scale and then worked up in detail.

– ²²⁷. Not all job files have initial sketches and Fagan has remarked that a secretary once cleaned out the office and threw away a lot of 'rubbish' as she termed it. A thorough search of the office has, however, revealed many interesting sketches, including a mirrored plan of Die Es.

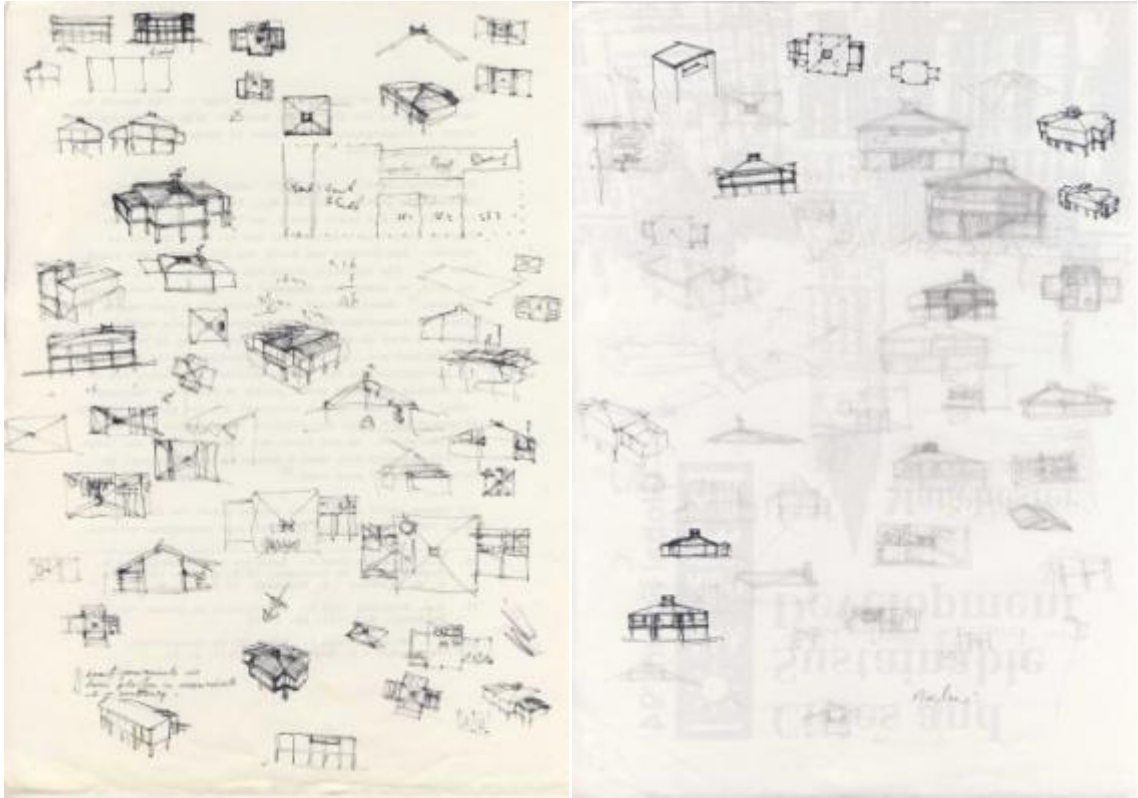


Figure 8.4. Fagan's ink thumbnail sketches on 2 A4 pages for House Beyers (1998) (Fagan archive - Job. No. 9813, undated).

Fagan draws on anything that he can lay his hands on. The back of an invitation to an art exhibition encapsulates the gridded layout of House Beyers (1998) (see Fig. 8.5). White paper, pencil and black ball point pen were used for House Mitchell (2005), while bumf was the medium for House Swanepoel in Cape St. Francis (1980). Fagan used the back of discarded printed paper for both House Swanepoel in Hermanus (1991) and the unbuilt Visser house in Swellendam (2007). Fagan rarely overlays drawings. Bumf was used for die Es (1965) (see Fig. 8.5). Sketches are repeated on the same page and in close proximity until the desired result is achieved and its status marked with a tick. The drawing is seen as a tool of exploration and not expression. Fagan (2008b) disagrees with the statement by Pancho Guedes that buildings are not as important as drawings as they, and not built form, express intent. Meintjies (2012) concurs:

I feel Gawie never thought a drawing, as such, very important or a work of art. It was simply a vehicle for the finished building (Meintjies, 2012).

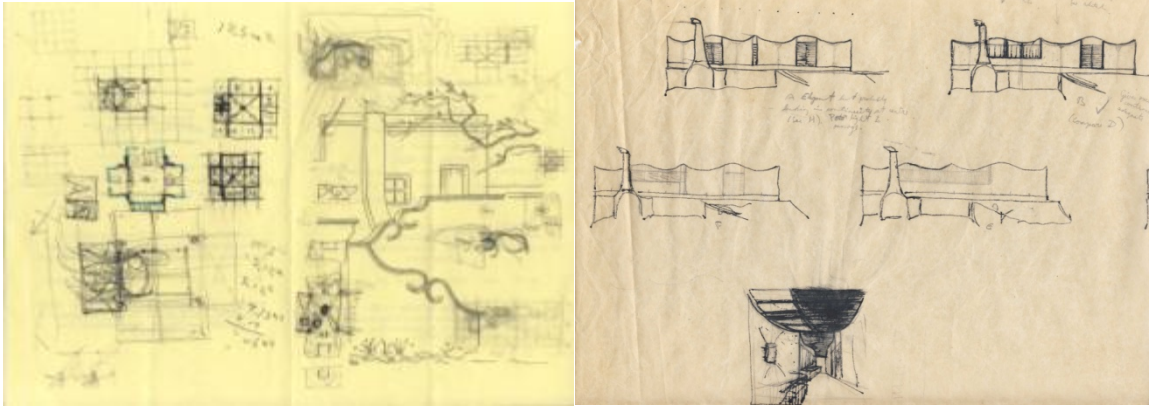


Figure 8.5. Left: Fagan's ink sketches for House Beyers (1998) on the back of an invitation to an art exhibition (Fagan archive job no. 9813, undated). **Right:** Fagan's fountain pen sketches on bumf for Die Es (1965) (Fagan archive - Job No. 565, undated).

Fagan (2008b) also relies on very rough models. A few have been discovered in the office basement, gathering dust, but these do not demonstrate a working quality. Elevations are firmly drawn and used as a template for the model. These are perhaps for presentation to the client and unfortunately no evidence of previous versions has been found save for a few photographs of a Balsawood and plasticine model for Die Es and clay for House Swanepoel in Cape. St. Francis (see Fig. 8.6).



Figure 8.6. Top left: Balsawood and plasticine model of Die Es (1965) (Fagan archive - Job No. 656, undated). **Top right:** Clay model of House Swanepoel at Cape St. Francis (1980) (Fagan archive - Job No. 8011, undated). **Bottom left:** Cardboard model of House Auldearn (1992) in possession of client (Fagan archive - Job No. 9302, undated). **Bottom right:** Cardboard model of House Mitchell (2005) (Fagan archive - Job No. 0503, undated).

The design process is largely divergent at this stage. Explorative work is extensive and formally driven and there is little evidence of site context shown in the thumbnail sketches. Only those of House Swanepoel in Cape St. Francis (1990) show the overall relationship of the house to the dunes. There are other plan drawings outlining the effects of view and climate but Fagan has indicated these were drawn to show the process to the client. It can be assumed that the site is engrained in Fagan's head and that he does not find it necessary to show this to himself. A slight convergence in process has been noted in the initial design phase. The roofscape pattern set by House Raynham (1967) often occurs in the initial phases of other designs. Explorations for houses Beyers (1998), Auldearn (1992), Neethling (1983), Fagan in McGregor (2005) and both Swanepoel houses (1980, 1991) show an offset chimney with roof planes drawn towards it (see Fig. 8.7). This was dispensed with in Beyers, Auldearn and Fagan in McGregor after further investigations.

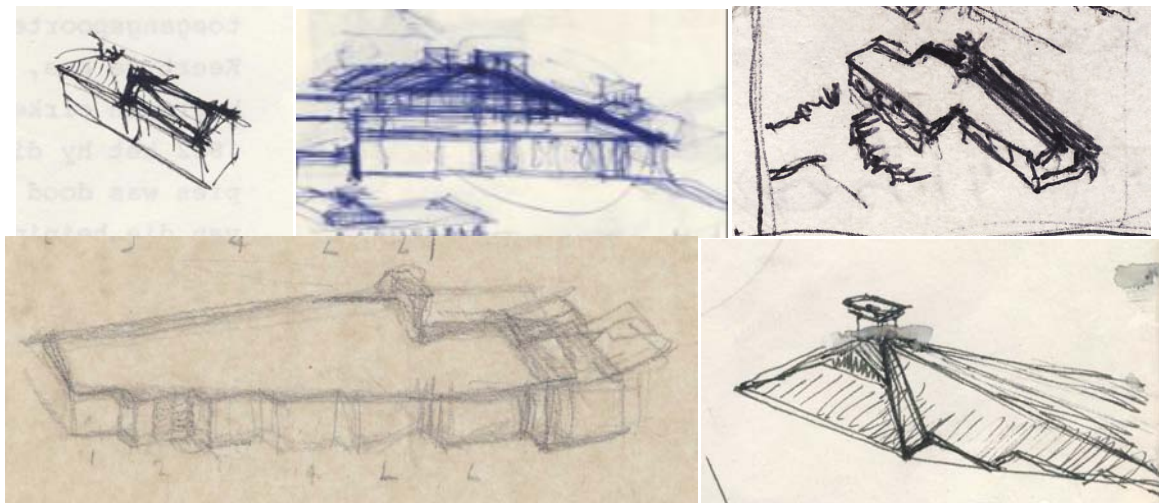


Figure 8.7. Top left: One of Fagan's initial sketch for House Beyers(1998) (Fagan archive - Job No. 9813, undated). **Top middle:** Sketch for House Auldearn (1993) (Fagan archive - Job No.9303 , undated). **Top right:** Sketch for House Fagan at McGregor (2005) (Fagan archive - Job No. 0507, undated). **Bottom left:** Sketch for House Swanepoel at Cape St. Francis (1980) (Fagan archive - Job No.8011 , undated). **Bottom right:** Fagan's sketch for House Swanepoel at Hermanus (1990) (Fagan archive - Job. No. 9021, undated).

The initial limited two-dimensional explorations illustrate an intense explorative process. Lines are drawn over and over as various programmatic options are explored and formal relationships investigated (see Fig. 8.8). Fagan's development of three-dimensional form is clearly founded in his knowledge of the Cape vernacular as the singular object is always sketched. His programmatic explorations are founded in his mediated Modern Movement education through the articulation of attenuated plans and combined service areas.

Both typology and functionalism ... despite their common root ... lead to opposite results: typology favours continuity, functionalism is more likely to lead to innovation (Brawne, 2003:22).

Technological exploration often accompanies the conceptual work, such as the barrel vaults at Paradys (2003) (see Fig. 8.8) and eaves details at House Fagan in McGregor (2005).

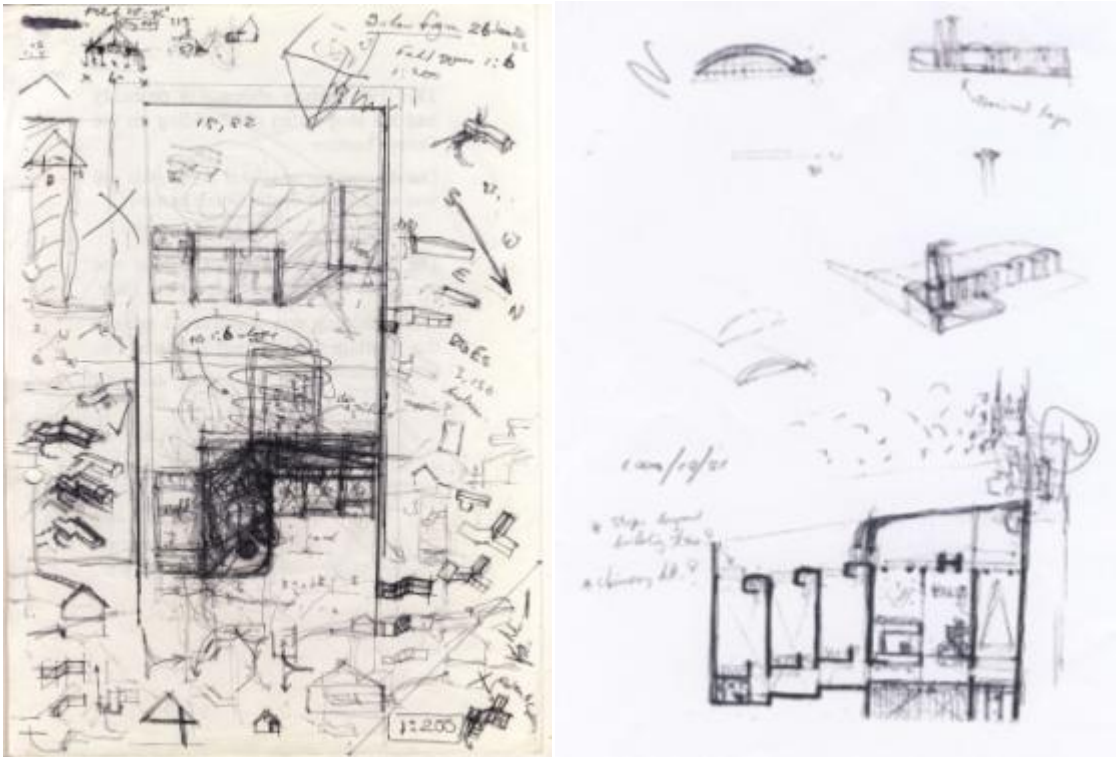


Figure 8.8. Left: Sketches for House Fagan at McGregor (2005) (Fagan archive - Job No. 0507, undated). Right: Sketches for House Paradys (2005) (Fagan archive - Job no. 0205, dated 15/10/2007²²⁸).

8.4.5. Evaluation

The limited sketches that remain of Die Es demonstrate Fagan's testing of design options. There are two plan options shown, one a complete mirror of the final design (see Fig. 8.9), while elevations are rigorously investigated and chosen options marked with a tick (see Fig. 8.5). It is only in this scheme that drawn evidence can be seen of the proportional systems that Fagan has learnt from Hambidge and Jooste's approaches. Details like door handles (see Fig. 7.13) and post-box covers are shown with ordering diagonal lines and although the system was supposedly applied to the entire building, the plan and elevation drawings do not show these investigations. A quick calculation of plan size, however, indicates that the first floor is made up of two adjacent rectangles with golden section proportions. Fagan notes (2008a) that he used this system in the early years of his work but that "you can't do it in the office as it is not practical".

A system of proportions was always applied in the final stages using his own set of dimensions based on the Modulor and applying Hambidge's Dynamic Symmetry (Meintjies, 2012).

– ²²⁸ This seems incorrect as the house had already been constructed.

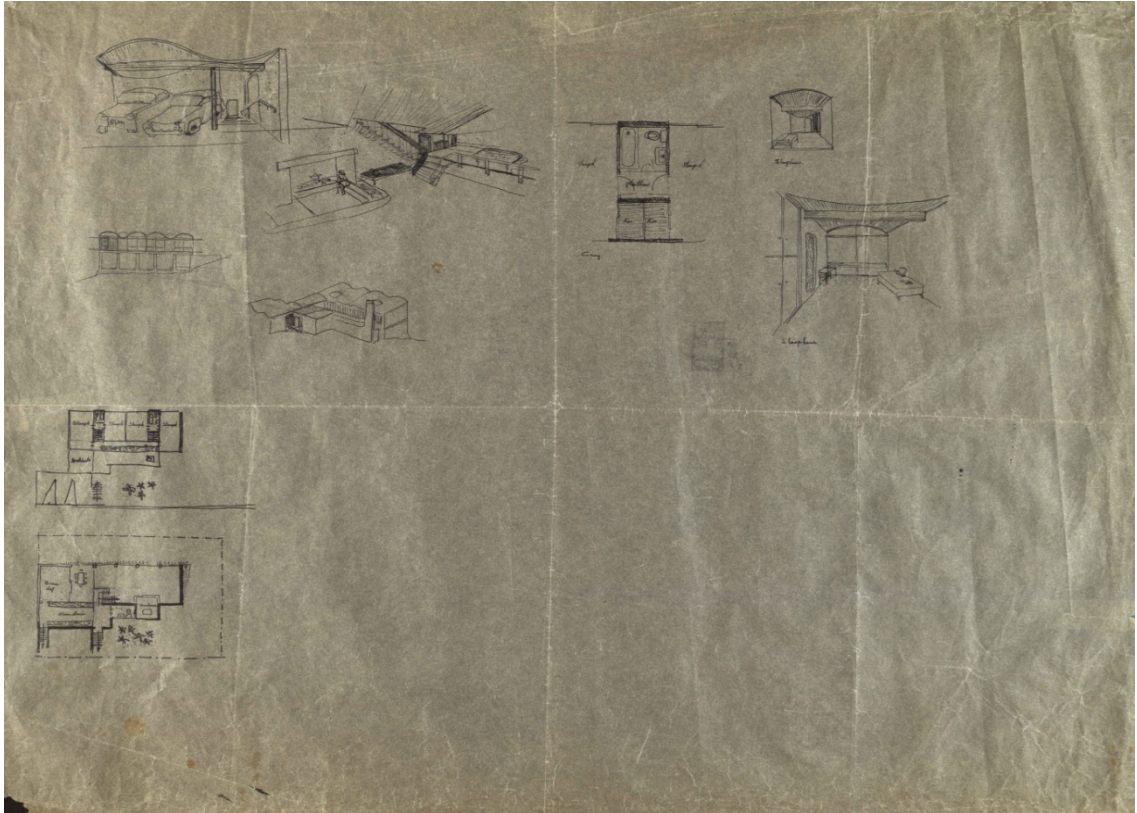


Figure 8.9. Fagan's sketches in ink on bmf for Die Es (1965). The drawings show a completely mirrored layout of that which was built (Fagan archive - Job no. 656, undated).

House Beyers (1998) is proportioned on a 1130mm bi-gridded system. An initial 3'10" (1168mm) grid was reduced to 3'8½" (1130mm) (See Fig. 8.10). Fagan was questioned on the commonality with Le Corbusier's Modulor of 2260mm but he could not recall using the 'master' as precedent. Sketch drawings are then drawn to 1:200 or 1:100 scale and then reworked until Fagan is happy. He says (2008b) that he constantly refers back to the initial ideas during this phase. At this stage of the design process a tendency towards convergence appears. Elements and approaches used in other houses are sketched and evaluated.

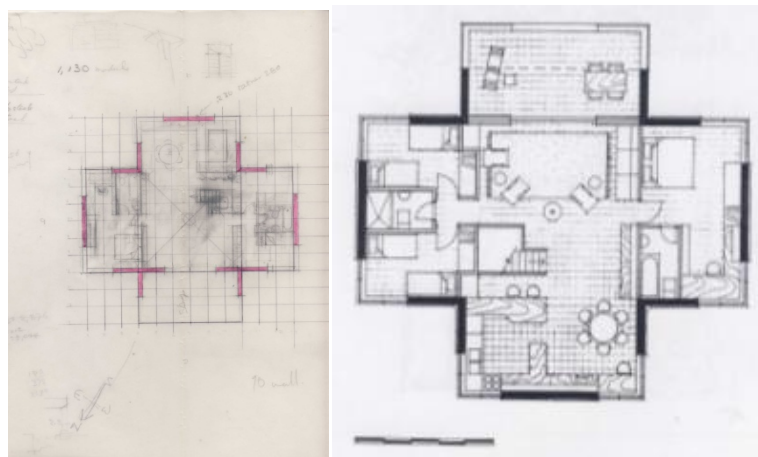


Figure 8.10. House Beyers (1998): Initial sketch showing grid layout on the left and final sketch plan on the right (Fagan archive - Job No. 9813, undated).

8.4.6. Action

Presentation drawings are very simple as Fagan does not put much emphasis on the drawing itself as he asserts that "the final test is in the building" (Fagan, 2009b). Earlier schemes were drawn by Fagan himself and often contain a three-dimensional perspective drawing showing the approach to the house (See Fig. 8.11). Later, when more staff was available, Fagan handed over sketch plan production, with presentations containing only simply drawn outline plans, sections and elevations. A 'working' model was often included. That of House Beyers (1998) was constructed to 1:50 scale and is quite detailed (See Fig. 8.11). Others like House Fagan in McGregor (2005) are at 1:200 scale with elevations cut from paper and applied to cardboard (See Fig. 8.11).

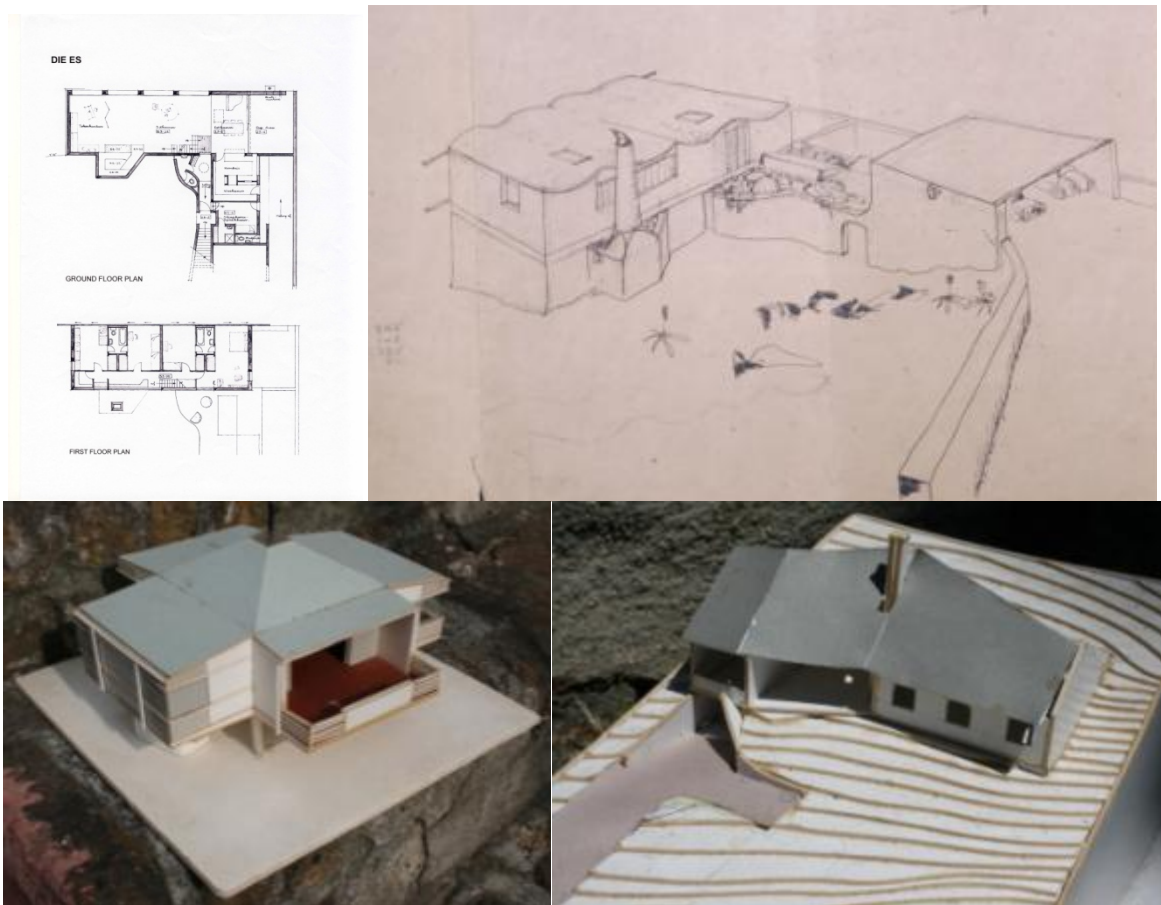


Figure 8.11. **Top left:** Fagan's sketch plan for Die Es (1965) (Fagan archive - Job No. 656, undated). **Top right:** Bird's eye view of Die Es (1965) (Fagan archive - Job No. 656, undated). **Bottom left:** 1:50 cardboard model of House Beyers (1998) (Fagan archive - Job No. 9813, undated). **Bottom right:** 1:200 cardboard model of House Fagan at McGregor (2005) (Fagan archive - Job No. 0507, undated).

8.5. HOUSE SWANEPOEL, CAPE ST. FRANCIS (1980)

Fagan's design for a holiday home (See Fig. 8.12) for Montu and Ian (Swanie) Swanepoel and their family in Cape St. Francis in 1980 received a South African Institute of Architects Merit Award in

1983. The citation (Anon, 1983: 38-39) reads as follows:

House Swanepoel at Cape St Francis, designed by Gabriël Fagan, has been selected for the 1983 Institute of Architects' Award of Merit.

This is a highly original example of regional architecture and is a sophisticated synthesis of the traditional and the contemporary.

The building is superbly related to its site and every nuance of sea and dune and beach is used to advantage. The floor levels, roof profile and planning system all take up cues from their surroundings in a most subtle way. Thus the building form appears to be moulded-by the same rules as the land form.

With its great roof, dominance of wall over opening and a low slung profile reminiscent of fishermans' (sic) cottages. The house refers directly to its Cape historical context. This underlay is given a range of new dimensions by shifting wall planes, opening the roof and cascading the floor level, all resulting in a fluid twentieth century spatial system which imbues an old format with a new rhythm. The shaping of its building elements into a complex three dimensional whole, is achieved with flair and finesse.

In planning terms, the establishment of the building's heart at the lowest part of the site, is finely judged. It gives, in combination with the chimney, a spatial dominance to the living rooms which is perceptible both internally and externally. From this core three "wings" of accommodation lead off, making it both the meeting place of the house and the creator of privacies between its three parts.

The elements and details of the building reinforce the central concept. The swept up shapes of the thatch convey strong impressions of wave and bird and wind shaped organic forms. Windows and doors (again reminiscent of the Cape tradition) sensitively integrated into wall areas and roof planes, set up spatial continuities. The materials of floors, walls, roof and ceilings, are handled with elegance and simplicity. Despite the strong colours used, a subtly related overall harmony is achieved and the colours produce an effect of joyousness appropriate to a leisurely seaside home.

There is a consistency throughout its detailing of care and craftsmanship with each part carrying the sense of its making and each apparently pleasurable to use.

In all, the building possesses a sense of rightness and effortless which marks it as a work of the highest calibre.



Figure 8.12. Sea facing elevation of House Swanepoel at Cape St. Francis (1980) (Author, 2005).

This author interviewed Fagan and his wife on 30 April 2008 with the express goal of ascertaining how the Swanepoel house was designed. The author had discovered the most complete set of design sketches²²⁹ for any of Fagan's houses and these were shown to the couple and questions posed. At the time of the interview almost thirty years had elapsed since the house was commissioned and it was difficult for Fagan to remember how the design had come about. It did become evident through the discussion that the design had slowly evolved through a rigorous investigation of both site and program and that the client brief had driven the overall organization of the plan. The form was derived from an attenuated plan and the aesthetic guideline restrictions imposed by the steeply pitched roof. The design generators closely mirror the description by Frank Lloyd Wright, quoted by Fagan (1969:5):

"This building is an example of the inspiration of a site, the co-operation of an intelligent, appreciative client and the use of entirely masonry materials."

8.5.1. Initiation

8.5.1.1. The clients and their requirements

The Swanepoels are related to Fagan through marriage. Montu²³⁰ was Fagan's younger brother Hannes's sister-in-law. Mr. Jan Swanepoel (Swanie) was originally a hotel owner in Bloemfontein and Fagan had designed the first drive-in bottle store in South Africa as well as the Cecil Hotel in Newlands for him, this being one of Fagan's first jobs when he arrived in Cape Town after the death of his father in the early 1960s. Fagan later designed a holiday house for the same couple in

– ²²⁹ Although many of the sketches are numbered, few are dated and there are leaps between some sketches, so it can be assumed that Fagan selected important ones to keep and then numbered these.

– ²³⁰ She died in 2007. Her husband is currently suffering from Alzheimer's disease and lives in a seminal Naudé Santos house in Rowan Lane, Kenilworth, Cape Town. Clearly an appreciation of good architecture runs deep and has resulted in a son, Pierre, training as an architect.

Hermanus in 1990 and an extension to an old Observatory house²³¹ for their daughter Lisa in 1989. Montu was an artist described by Gwen Fagan as a very appreciative person who needed to be convinced of every design decision. But she was also sensitive and creative and could thus be easily communicated with in design terms (Fagan, 2008d). The project was initiated in 1980 through a telephone conversation and follow-up letter from Montu, dated 23 April 1980.

8.5.1.2. The brief

A hand-written letter gives a clear outline of the functional requirements, a limited description of the contextual responses they required and the ambience the clients were looking for (See Fig. 8.13). The house had to be integrated with its environment and had to be simple and not suburban, while a cool, fresh feeling had to be created. All living and bedroom areas had to have a view of the sea. Specific mention is made of connection to the outside from the five bedrooms and the necessity for clear separation between parents' and children's bedrooms due to Swanie's sleeping problems. A private living area for the parents was also required. Fagan's follow up letter demonstrates his organized approach to design: first a meeting with the client and then a preference for their written requirements, followed by a site visit.

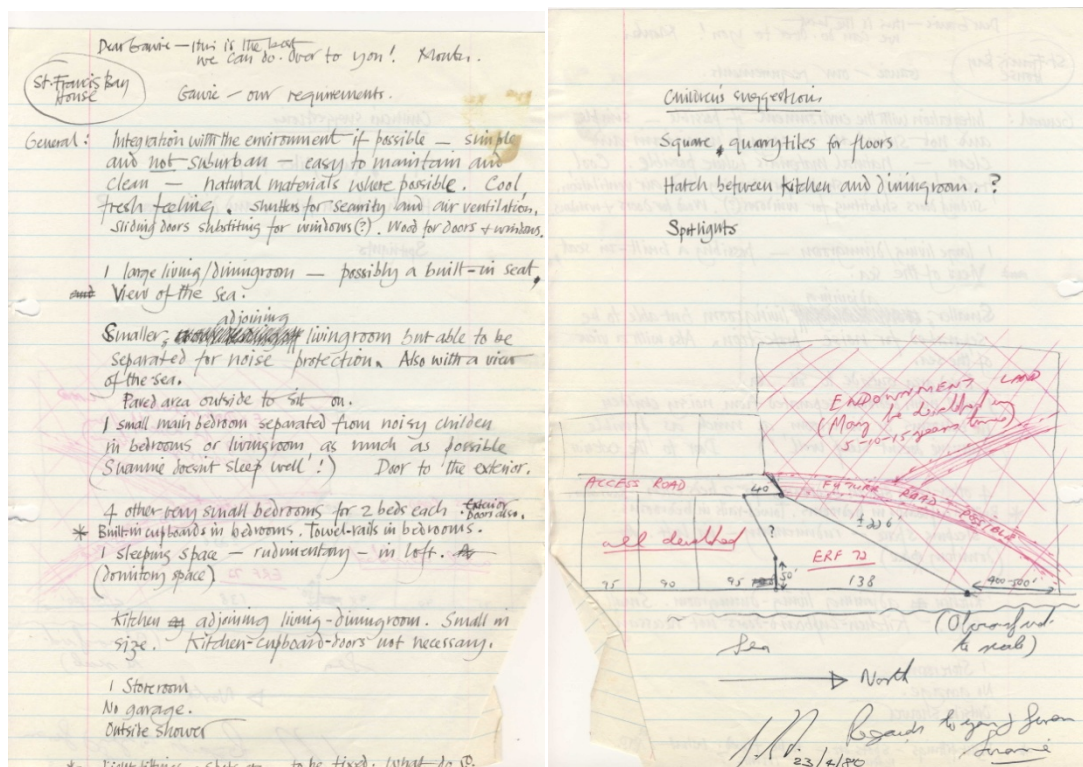


Figure 8.13. Client requirements on two A4 pages as drafted by Montu for House Swanepoel at Cape St. Francis (1980) (Fagan archive - Job No. 8011, undated).

— ²³¹ Interestingly enough, the clients had met Hans Hallen while resident in Durban and had asked him to also do a proposal for this alteration.

8.5.1.3. Context

The site sits directly on the beachfront at the northernmost end of the initial St. Francis Bay development in Cape St. Francis (See Fig. 8.14). To the south, existing suburban houses dominate the dunes while a green open space to the north provides relief. The most prominent features of the site are its almost triangular shape, a sloping dune and the sea view to the east. A Sunday Times article of 30 October 1983 (Malherbe, 1983) reports that the design of the house had to subscribe to the very stringent aesthetic guidelines laid down by the developers of St. Francis Bay. These included thatched or black-tiled pitched roofs sloping between forty-five and sixty degrees, limitations on the size of dormer windows, and a limited black and white colour palette.



Figure 8.14. Left: Google earth image of House Swanepoel at Cape St. Francis (1980) (www.google earth [Accessed 1/09/2011 20:46]). Right: View of house Swanepoel from the sea (Fagan archive - Job No. 8011, undated).

8.5.2. Preparation

According to a letter forwarded to the client and dated 24 April 1990, Fagan indicates that he will make a site visit on Sunday the 3rd of May and a visit to the Divisional Council on the 4th. A set of four pages of undated notes were made by Fagan (See Fig. 8.15), seemingly following the Divisional Council visit, and these outline salient points regarding setback lines and wall and roof materials. Fagan wrote that brick, stone or concrete walls and thatch or tiled roofs are permissible. His summation about outbuildings such as garages not being permissible no doubt led to the lack of garages or carports in the final scheme. Fagan also wrote that dormers are permissible but that their extent must be limited.

A clear written climatic analysis follows and Fagan indicates that the south-west wind is particularly irritating. Fagan also lists the names, addresses and some pertinent comments about local builders.

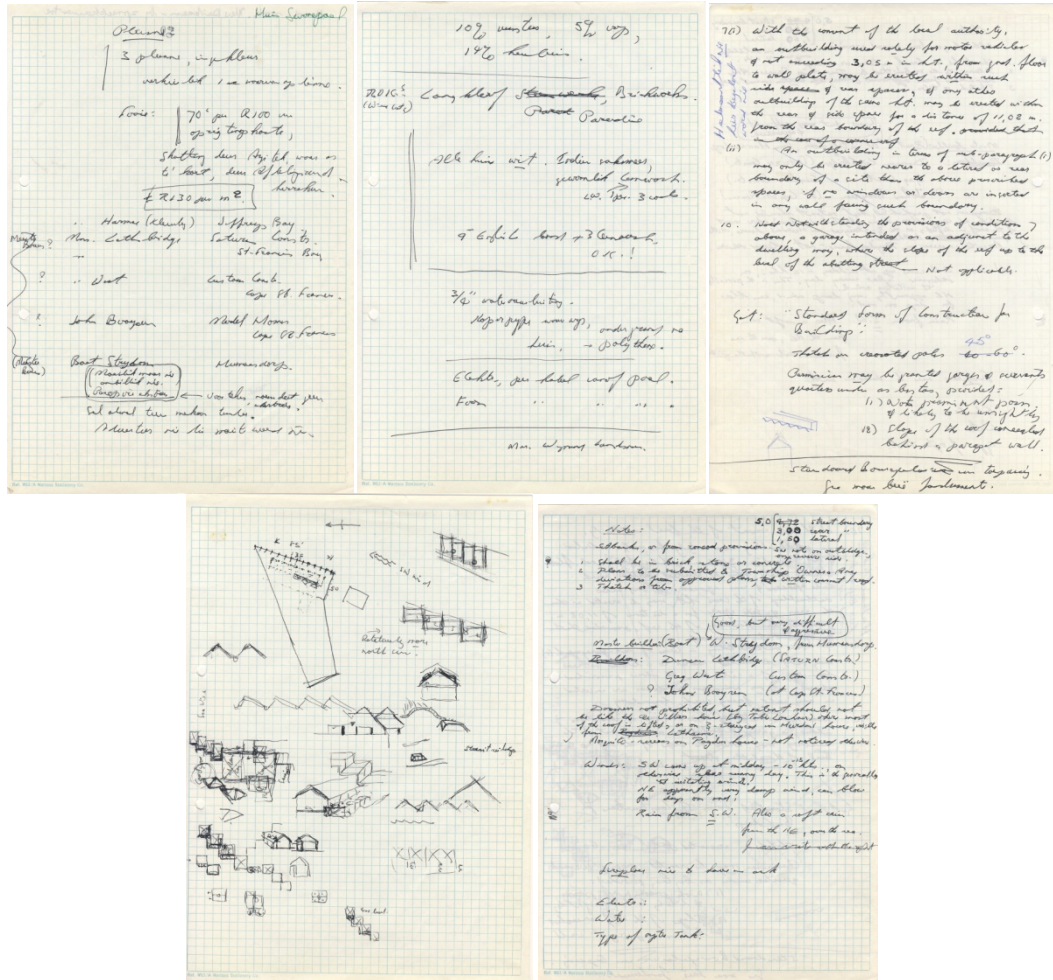


Figure 8.15. Fagan's notes on grid line A4 paper (Fagan archive - Job No. 8011, undated).

It is interesting to note that at this point no sketches are made together with the text. The fourth page of the set contains sketches only and although undated the supposition can be made that they were completed shortly after the visit to the site and perhaps even while still in Cape St. Francis. They demonstrate convergence in design thinking through the exploration of a linear form²³² and stepped bedrooms, as had been done in House Raynham (1967). This was, however, the first single house that Fagan had designed in ten years, following House Levin in Langebaan in 1970, although Fagan had designed a series of stepped and barrel vaulted housing units for farm workers in Stellenbosch in 1975.

The initial sketches show stepped bedrooms to the northern end of the property and the outline of a wing to the south-west corner where more site space was available. These sketches demonstrate the synergy of planning bulk and site space but are organizational rather than architectural or spatial. A small hint at roof exploration can be seen in the sketch showing imitative 'wolfneus'²³³ dormers.

– ²³² An aerial photograph reveals the extent of the attenuation of the plan when compared to other houses in the area.

– ²³³ This was a feature of traditional Cape vernacular houses, the dormer usually being placed over the front door. The English translation means wolf's nose.

8.5.3. Incubation

The first dated sketch that outlines accurate plan dimensions and the beginnings of a scheme made on 25 July 1980, three months after the initiation of the project. A list of office projects in 1980 indicates that a total of seventeen other projects were on the go and about ten continuing from the previous year. Work at The Castle was still ongoing and so a lag time of three months was, in the prevailing context, not a prolonged period.

8.5.4. Synthesis

The first sparsely drawn site plan of 25 July 1980 (See Fig. 8.16) indicates the direction of north, the high water mark, site boundaries, setbacks and a grid drawn on the sea facing edge of the property. No climatic features are indicated and no contours are drawn. The prominent dune is also not indicated. This demonstrates Fagan's absorption of site and program knowledge during the preparation stage. This drawing was made on burnf and probably served as a base for the explorations that followed – possibly rare evidence of a layered approach not seen in other projects. The next few sketches (marked 1 to 5) are explorative plans with no three-dimensional exploration.

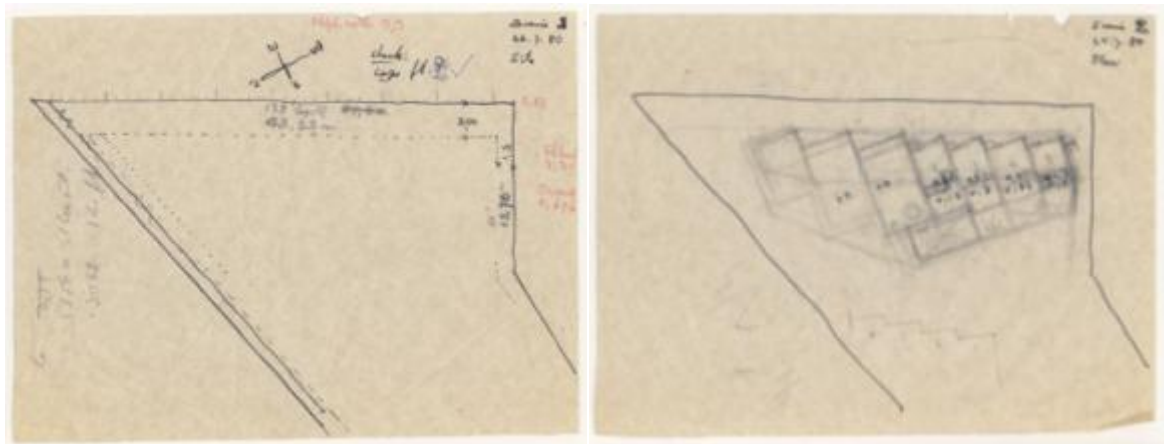


Figure 8.16. Left: Fagan's site study (Fagan archive - Job No. 8011, 25/07/1980). Right: First plan exploration (Fagan archive - Job No. 8011, 25/07/1980).

Sketch 1 (See Fig. 8.16) lays the foundation for subsequent design decisions. The attenuated organization of the first proposal is maintained so that the view requirement is satisfied. But two further decisions are made. Firstly, the relocation of the bedrooms to the southern edge of the property and secondly, a proposal to keep the ridge line level, implying that rooms will need to step inwards and also rise in floor level. Fagan explains (2008d) that the pitched roof was the main determinant of many of the design decisions. He further notes that the steepness of the required roof pitch creates a large roof profile as the roof ends up half as high as the plan is wide. Fagan

prefers to use a lesser pitch than forty-five degrees which to him "looks awkward"²³⁴ (Fagan, 2008d). The bi-nuclear plan, which resolves the requirement for quiet spaces for the parents away from the children, is now also evident. The awkward angle of the stepped bedrooms seems to be generated from a due east orientation. Fagan explains (2008d) that these steps were purposefully created to provide partly concealed spaces. A tenuously linked carport attempts to define entry.

The next two pencil sketches (also dated 25 July 1980) slowly develop the possibilities of the stepped plan, indicating levels required to achieve the desired ridge line. The carport has now been removed. The second of the two sketches (numbered 2.1) (See Fig. 8.17) illustrates another major design leap with the addition of a central wing perpendicular to the sea-facing boundary. It defines two spaces: making the site more useful, guiding entry to the front door from the awkward dog-legged site, and providing a space protected from the south-west wind. Fagan remarks (2008d) that one form would have been very bland with an indeterminate space beyond it. He explains that the wing makes the site much more useful by creating separate private and approach areas. The difference between these two spaces is not clearly defined on the sketch and it seems as if entry was originally to be from the northern court. The addition of the wing also anchors the house more directly to its long edge. The rigidity of the stepped plan is tempered by the contrasting geometries, with some subtle manipulations occurring at the northernmost end. A small sketch shows an exploration of roof connections and Fagan purposefully reduces the width of the wing to allow its roof to be less dominant than that of the sea facing wing.

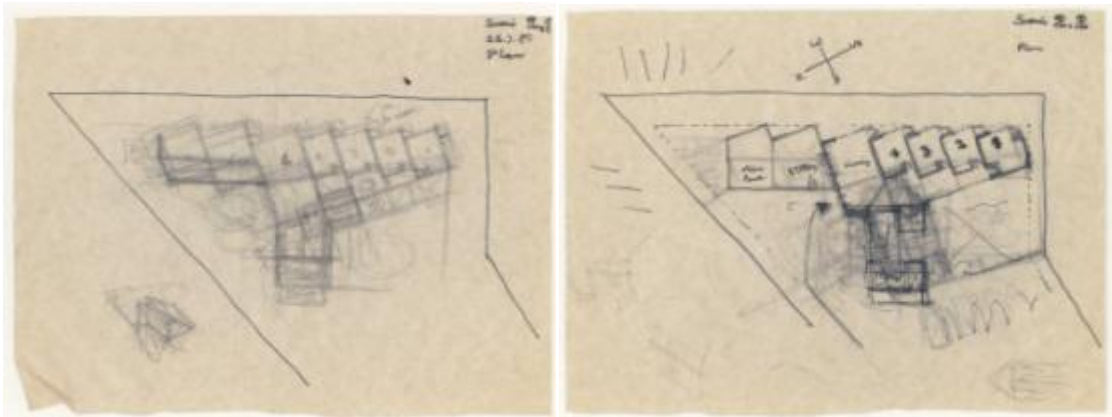


Figure 8.17. Left: Fagan's site study (Fagan archive - Job No. 8011, 25/07/1980). Right: Exploration of wing orientation (Fagan archive - Job No. 8011, undated).

Sketches numbered 2.2 (See Fig. 8.17) and 2.3 (see Fig. 8.18) depict a firming up of underlying pencil explorations. Sketch 2.2 shows a northern entry more clearly defined, while a southern courtyard is created with a wall against which cars can park. The 'irritating' south-westerly wind is also drawn and indicates the necessity for the northern courtyard definition. Sketch 2.3 (See Fig. 8.18) changes the geometry of the entry wing to align with those of the stepped bedrooms. Sketch 2.4 (See Fig. 8.18) indicates a change in orientation of the kitchen, making it parallel with the bedrooms and

— ²³⁴ The drawings, however, show the pitch at 45 degrees as the aesthetic guidelines for the area stipulated.

consequently shortening the length of the wing.

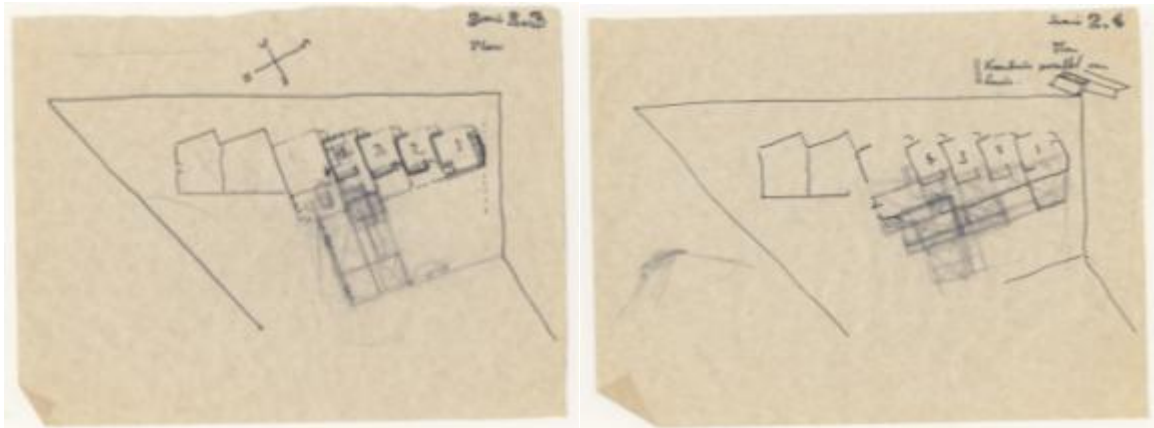


Figure 8.18. Left: Shift in orientation of kitchen wing (Fagan archive - Job No. 8011, undated). Right: Exploration of services to more closely align with bedroom wing (Fagan archive - Job No. 8011, 25/07/1980).

Sketch 2.5 (See Fig. 8.19) finalises the entry by shifting it to the south-west corner of the site. The extension of the yard wall assists with the definition of the entry space. Sketch 2.6 (See Fig. 8.19) firms up decisions regarding entry and private courtyards, with the addition of a kitchen yard wall and the removal of the southern area's walls, creating a forecourt for cars. There is also a preliminary exploration of the open corner treatment to the bedrooms.

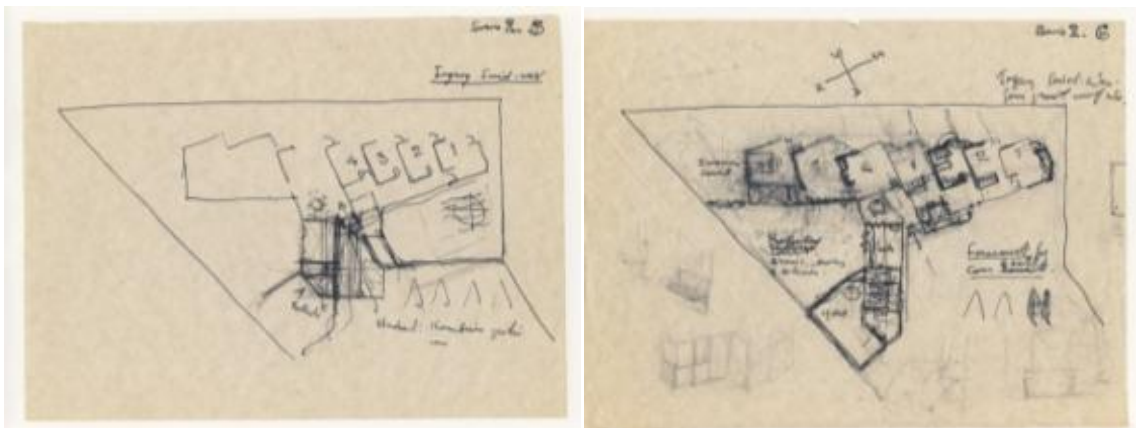


Figure 8.19. Left: Entry shifted to south-west corner (Fagan archive - Job No. 8011, undated). Right: Courtyard definition (Fagan archive - Job No. 8011, undated).

Sketch 3 (See Fig. 8.20) initiates an exploration of dormer windows and the decision seems to have been made quite quickly that the roof should be peeled back rather than having insertions placed into it. Sketches 3.1, 3.2 (twice) (See Fig. 8.20) depict a series of sections that outline the consequences of changing the room width in relation to the ridge height and show Fagan's accurate calculations of the implications of each decision. Sketch 4 (See Fig. 8.20) shows a proposal for a sea facing elevation and a bird's eye view. Ridge and fascia lines are explored as continuous elements. The last sketch in this series provides a detail exploration of the service wing layout.

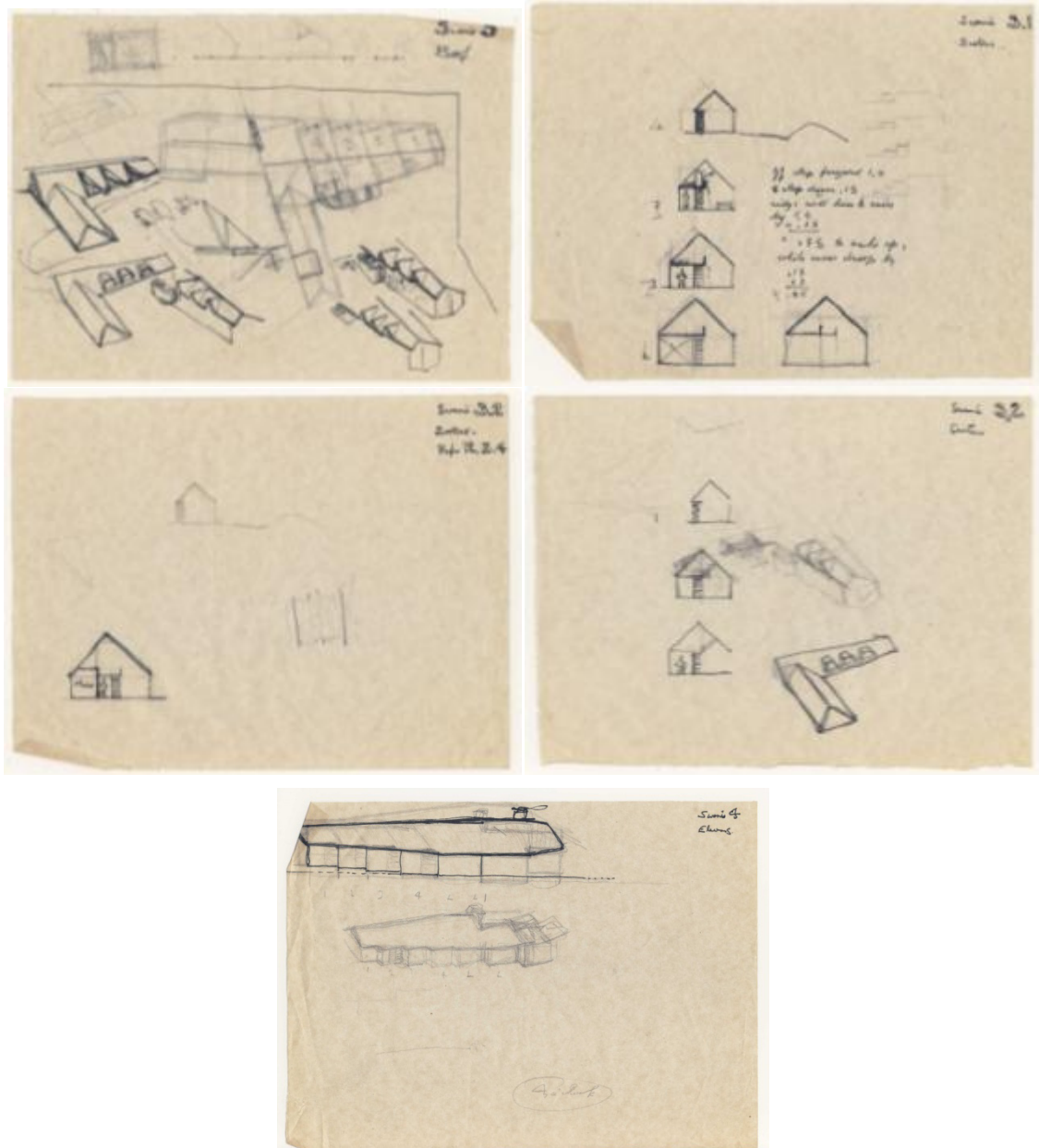


Figure 8.20. **Top left:** Exploration of dormers (Fagan archive - Job No. 8011, undated). **Top right:** Sections that explore relationship between changing building width and roof height (Fagan archive - Job No. 8011, undated). **Middle left:** Similar section exploration (Fagan archive - Job No. 8011, undated). **Middle right:** Sections and dormer exploration (Fagan archive - Job No. 8011, undated). **Bottom middle:** Roof sketches (Fagan archive - Job No. 8011, undated).

8.5.5. Evaluation

The next set of sketches, also executed on bumf, is numbered from 1 to 10 and Fagan says that these were drawn to explain the design to the client. These are wonderfully evocative drawings as they not only explain the design but also the thinking of the architect. They are a rare example of the concretisation of the design process which is, for Fagan, a largely cerebral one.

Sketch 1 (See Fig. 8.21) depicts the approach to the house from the sea, Fagan using the analogy of a hammock. The beach at Cape St. Francis is very deep at low tide and the view of the house from the sea is still today as it was in 1980. The roof edge closely follows the slope of the dune, and no doubt the ground slope behind the dune determined the raised levels of the bedrooms and the tapering form to achieve a relatively level ridge line.

My design for a holiday house at St Francis Bay was required by regulation to conform to its neighbours in terms of wall finish, roof pitch, and roof materials. But I hope that I achieved something Intangible even beyond that, in moulding the roof contours and floor levels so that the house would look as though slung comfortably like a hammock following the shape of the dunes (Fagan, 1983c: 50).



Figure 8.21. Depiction of conceptual idea of house strung as a hammock between the dune as viewed from the sea (Fagan archive - Job No. 8011, July 1980).

Sketch 2 (See Fig. 8.22) outlines the main design generators. Fagan describes the strangely shaped site as jagged. His contextual sketch indicates the sweeping sea views to the south and east (which explain the stepped bedroom orientations). He draws the climatic effects of a 'happy sun' to the north and the cold south-westerly wind and then details the restrictions of the pitched roof. The order of these sketches is important as it illustrates the dominance of context in design decision making. Copious notes are rewritten and re-evaluated just as design decisions are. Fagan apologises for keeping the sketches at a small scale, explaining that this prevents one "getting bogged down by detail" or not being able to "see the wood for the trees". This approach reinforces the thumbnail sketch technique that Fagan was taught as a student.

privacy and extended sea views achieved by the stepped arrangement. He further explains the use of the roof volume over part of the bedrooms and the adjoining passage where a low ceiling is not required. North and west facing dormers (that are generated by "twisting the eaves line") allow sunlight to penetrate at a high level to reach those spaces that cannot receive direct northern sun.

The simple distant statement becomes more complex on closer acquaintance, and the ultimate bedroom spaces although small, offer many possibilities of opening or partly shutting the sea view, and each have small storage cum extra sleeping lofts that are lit by small triangular roof windows (Fagan, 1983c:9).

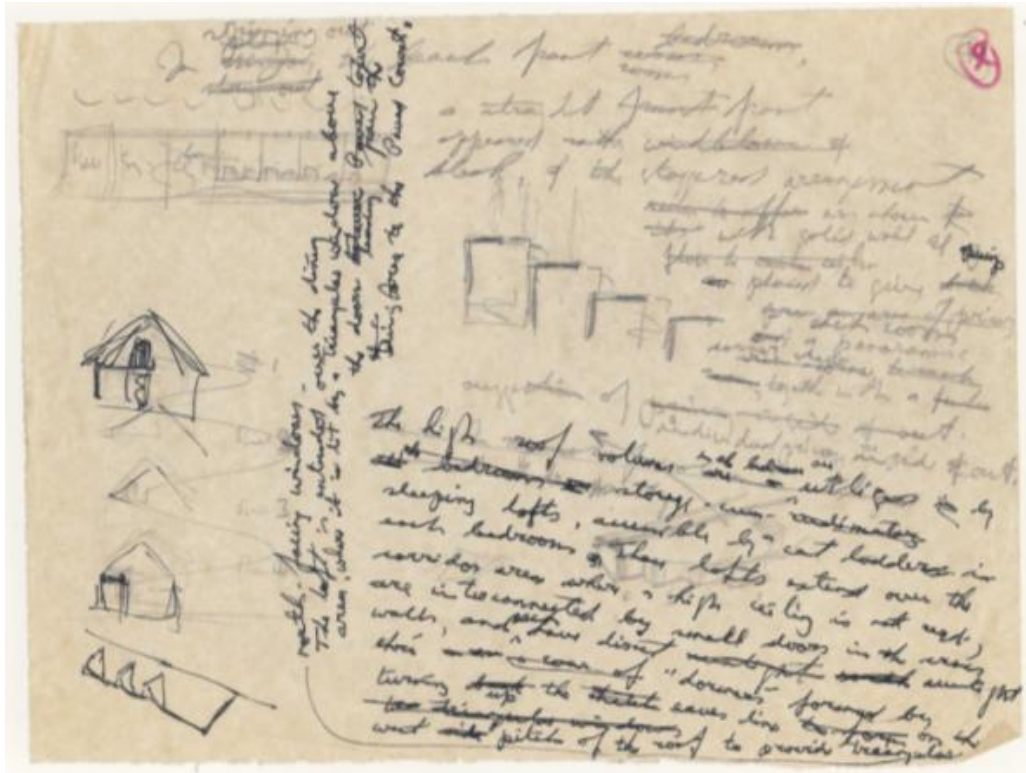


Figure 8.24. Articulation of bedroom spaces (Fagan archive - Job No. 8011, undated).

Sketch 5 (See Fig. 8.25) explains the "hammock" analogy and the organization of spaces in width and height to accommodate the roof profile that acts like a "whale's back" in its slightly arching nature. Here the first mention is made of the double banked chimney which did not appear in any of the initial sketches. Fagan uses the same principles as those of the roof build-up in House Raynham (1967) to create a focus of attention at entry and over the central living space. The hearth of the home is accentuated in a Frank Lloyd Wrightian manner. An important sketch shows the definition of bedroom spaces as partly enclosed and independent cells. Fagan has noted (2008d) that his concern for the sandy ground conditions led to a decision to separate walls to allow them to move independently of each other.

Sketch 7 (See Fig. 8.27) shows the development of the bedroom plan with its clear circulation route and sleeping spaces. Fagan also investigates the location, orientation and possible colour distinction in doors and shutters that the clients requested for security.

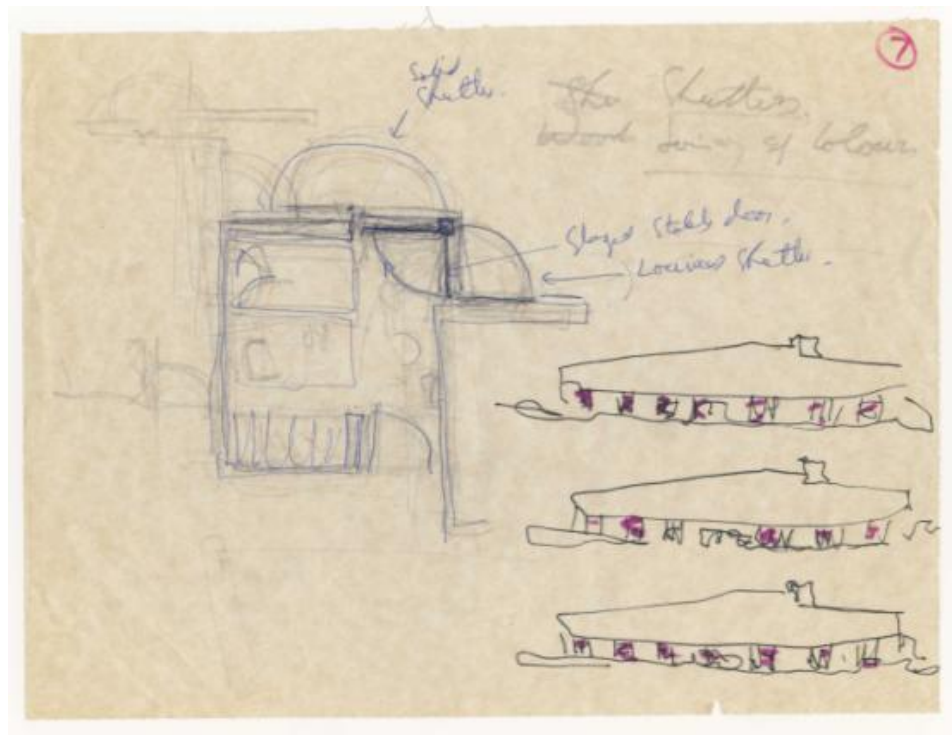


Figure 8.27. Bedroom plan exploration and colour study (Fagan archive - Job No. 8011, undated).

8.5.6. Action

Sketch 8 (See Fig. 8.28) represents the final plan development. A pencil drawing on bumf to 1:200 scale illustrates an alteration to the orientation of the service wing which opens up the entry route. The definition of the southern entry is also improved by the addition of a courtyard to the main bathroom areas. Sketches 9 and 10 (See Fig. 8.28) depict the beginnings of a three-dimensional exploration of building form from a bird's eye perspective. The sketches seem to be based on a photograph of a model as there is great consistency between the drawings. Fagan explains to the clients that he has already leaked a preview of the design to his younger brother's wife Sheilagh, and that if they (the clients) are happy with the current approach, he will go ahead with resolving the detail.

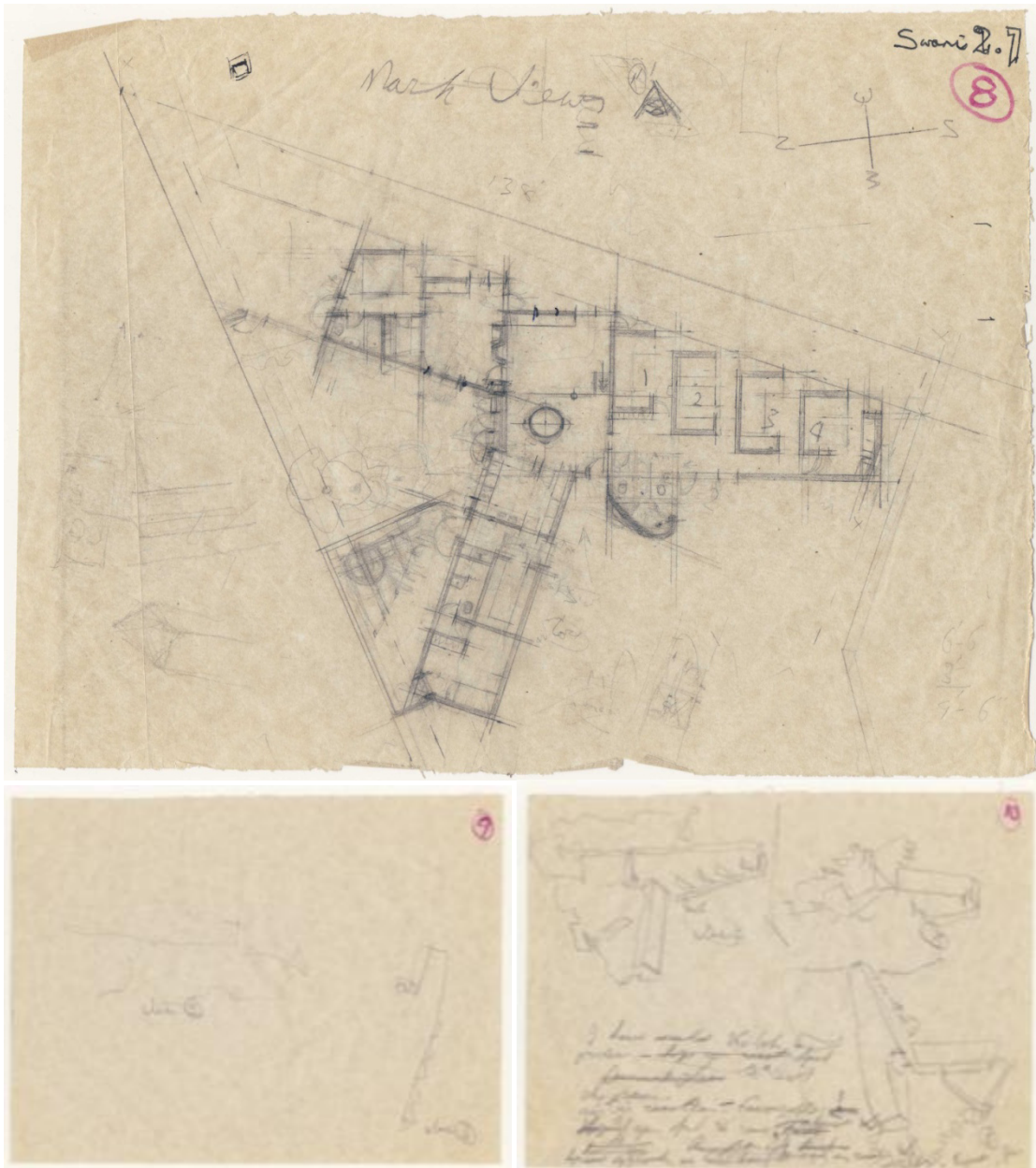


Figure 8.28. Top left: Final plan development (Fagan archive - Job No. 8011, undated). Bottom left and right: Three dimensional exploration of building form (Fagan archive - Job No. 8011, undated).

Fagan made two models during the design process. One is in clay and displays the plastic quality of the design. The other is a more tectonic exploration that articulates the wall structure (See Fig. 8.29). These models are undated and it is unclear at exactly what stage of the process they were made, but the tectonic model was presumably completed late in the process as it reflects the final undated sketch plan.

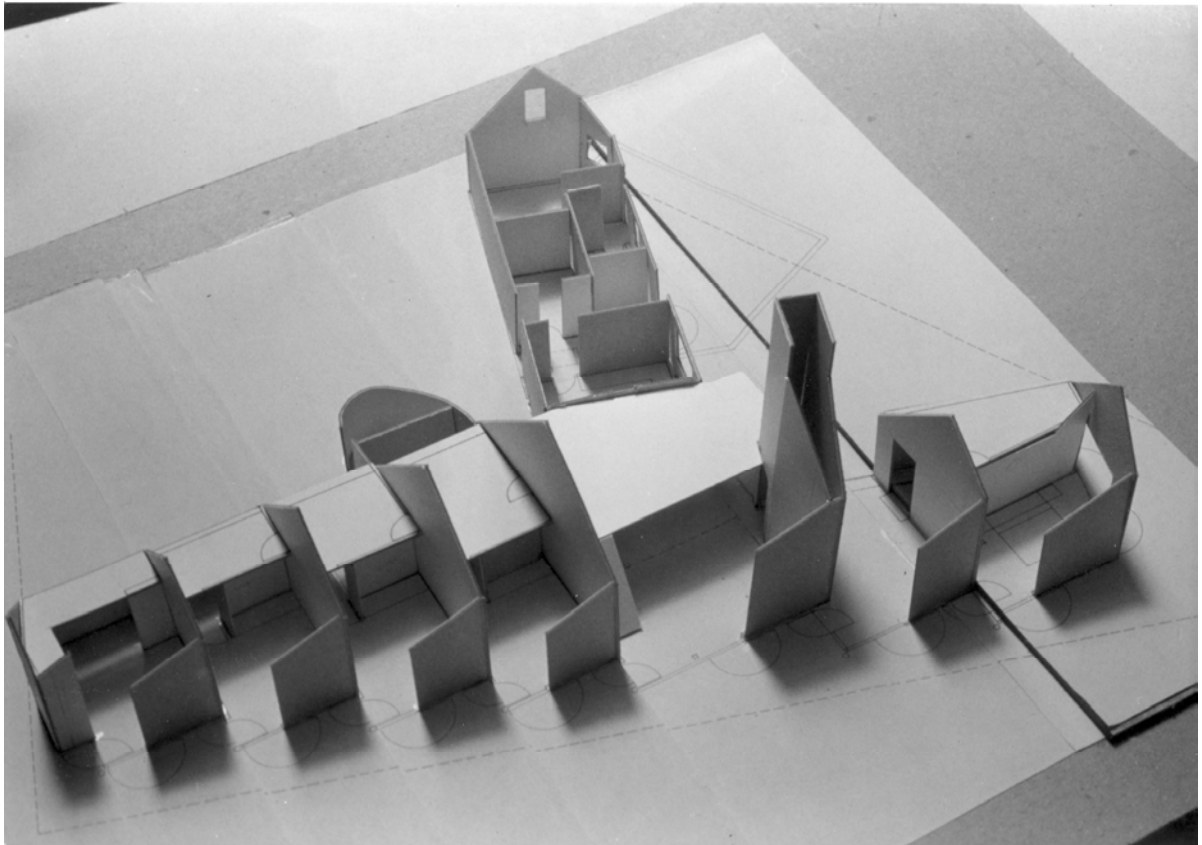


Figure 8.29. Left: Cardboard model depicting main walls as **structural and space defining elements**(Fagan archive - Job No. 8011, undated).

The final solution expresses many of the design principles that Fagan would use in future houses. Plasticity of expression, attenuated plan, staggered bedrooms, chimney as focus, roof drawn towards the hearth of the home and a limited architectural promenade beginning at the site boundary. The following diagrams (Fig. 8.30) attempt to synthesise the genesis and development of the design.

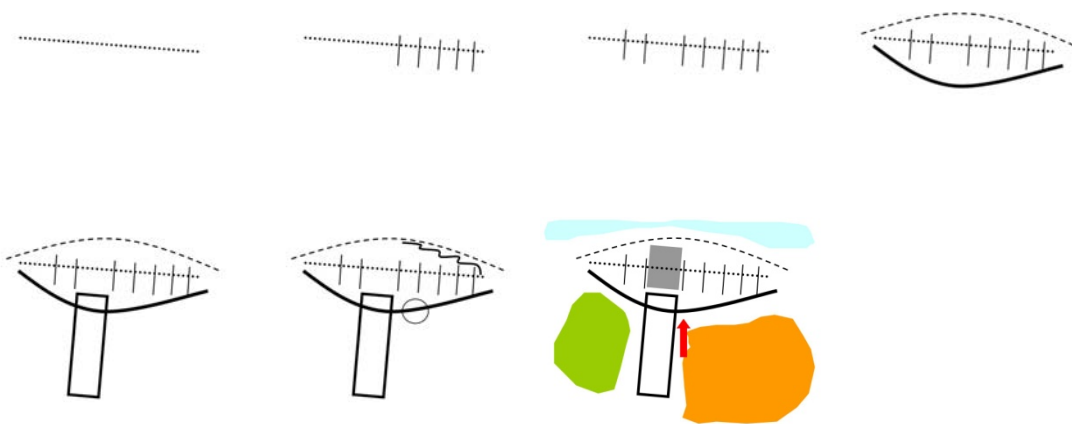


Figure 8.30. Diagrams illustrating the development of the design for House Swanepoel in Cape St. Francis (1980) starting with the attenuated form as a response to site and subsequent articulation to define spaces and edges (Author, 2009).

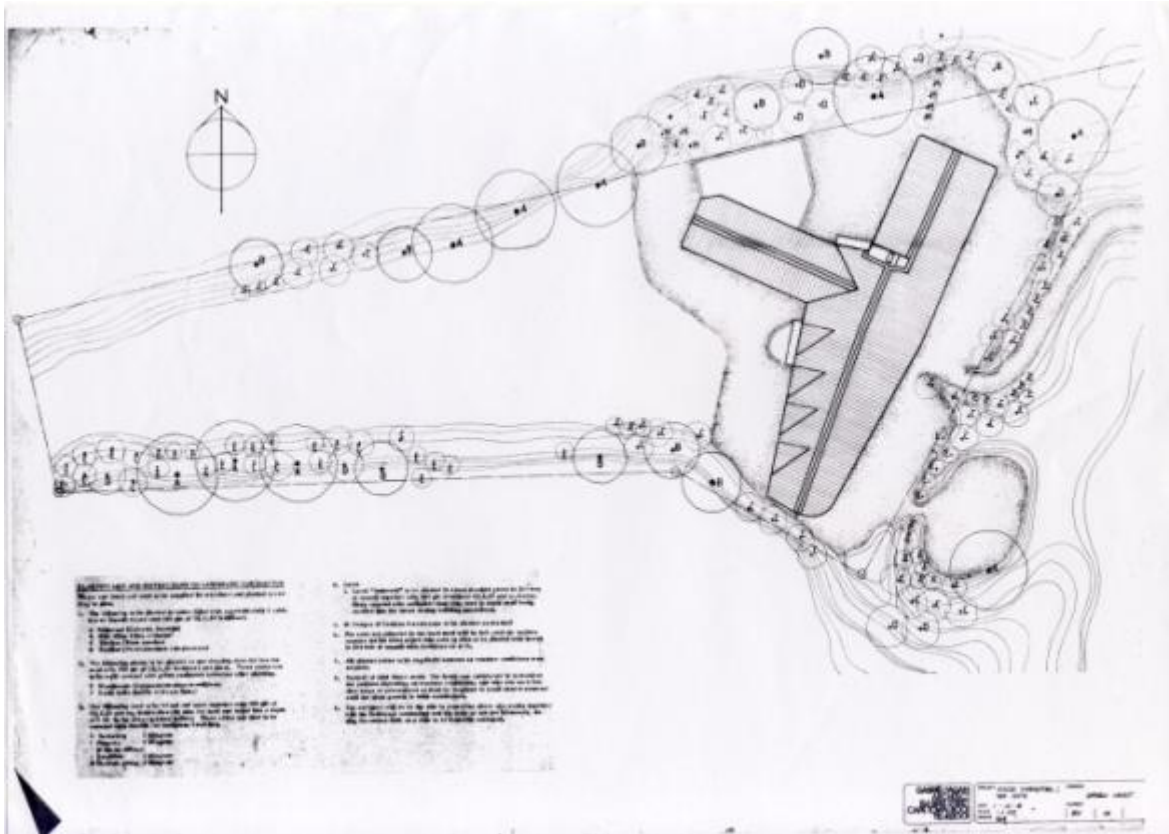


Figure 8.31. Site plan (Fagan archive - Job No. 8011, 1/12/1981).

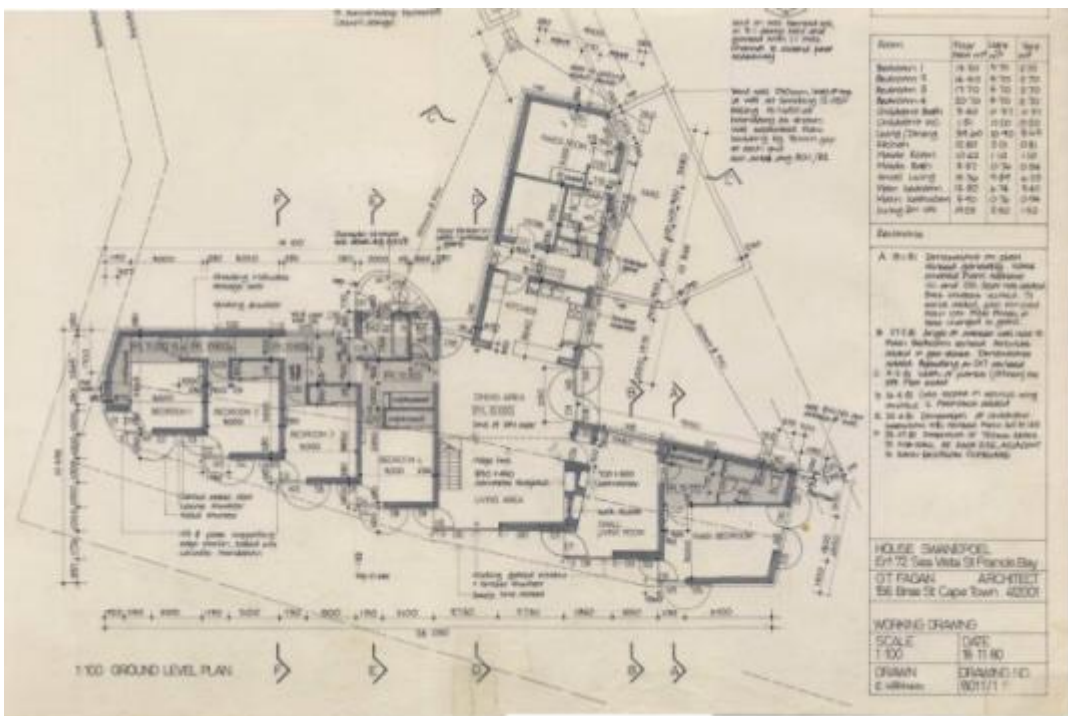


Figure 8.32. Part working drawing showing plan (Fagan archive - Job No. 8011, 18/11/1980).

Working drawings were completed from around mid November 1980 to February 1981 (See Fig. 8.31-34 & 36-37). The roof structure and associated spatial quality is explored at great length (See Fig. 8.34) as are timber doors, windows and shutters which were all purpose made (See Fig. 8.37). Fagan remarks (2008d) that the twisted boarding to the doors is a tradition in the Cape which you can see at Groot Constantia. The tectonic quality of the plan is clearly articulated into structural and non-structural elements (See Fig. 8.35).



Figure 8.35. **Top left:** The Fagans picnicking alongside the partly constructed building. **Top right:** Walls constructed to roof height. **Bottom left:** Roof under construction viewed from site entry point. **Bottom right:** Roof under construction as viewed from sea edge (All Fagan archive job no. 8011, slide collection IC).

There is a clear separation between the main block and associated wing as well as the compartments of the bedroom areas. The voids are filled with lighter timber framed elements and the mediation between the stereotomic qualities of the traditional Cape wall and the tectonic qualities of the Modern Movement provide a unique architectural synergy. It is also the only Fagan example where timber columns are used externally to support a roof structure. The usual internal timber column is visible in the dining and bedroom spaces but the external gum pole support is a unique solution to the problem of ground support and aesthetic mediations.

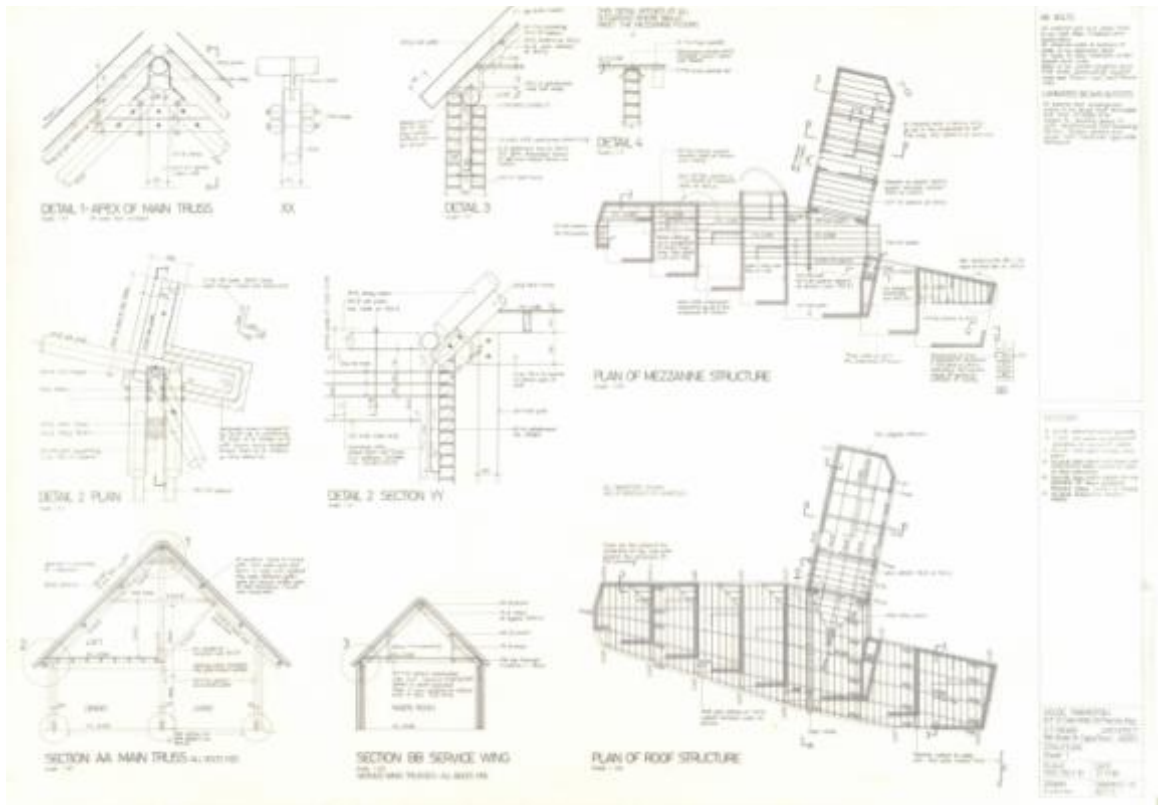


Figure 8.36. Part working drawing showing structure (Fagan archive - Job No. 8011, 27/11/1980).

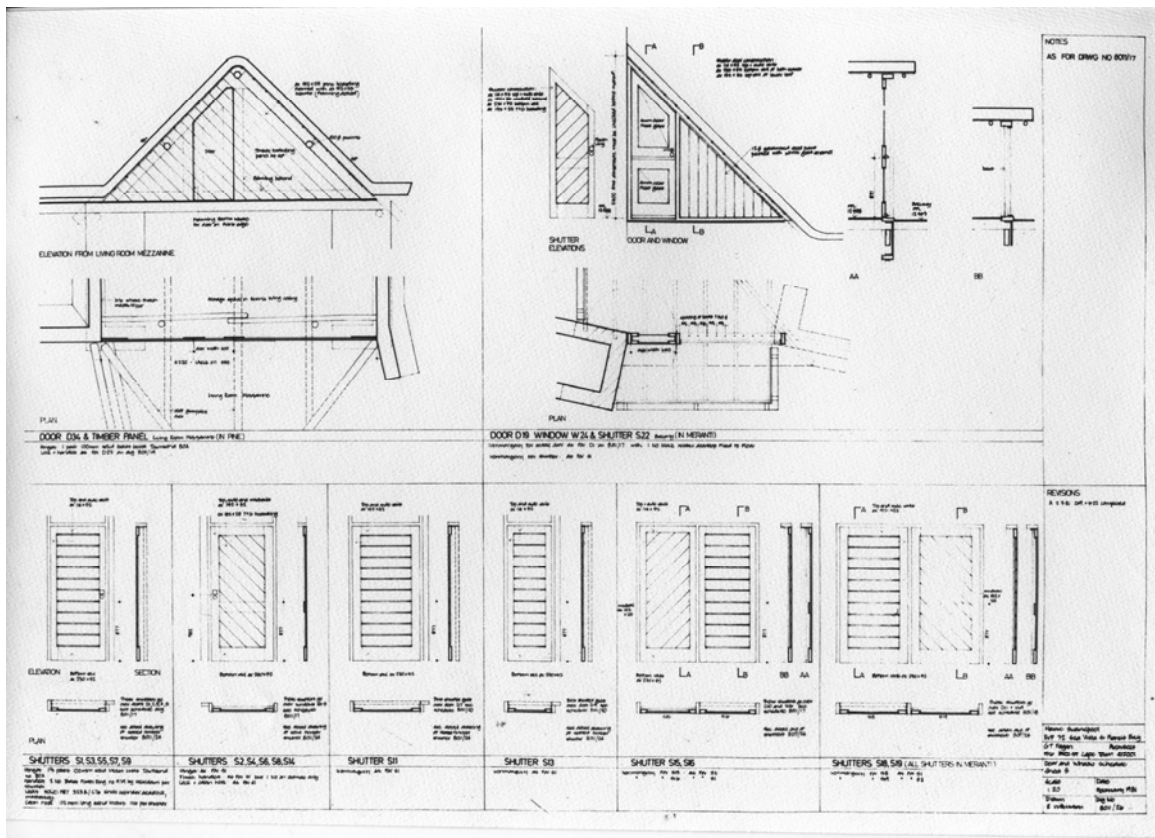


Figure 8.37. Door and dormer schedule (Fagan archive - Job No. 8011, February 1981).



Figure 8.38. Views of the house as built. **Top left:** View from sea. **Top middle:** View from north west to living areas. **Top right:** View to sea from under roof at bedrooms. **Second from top left:** View to the north. **Second from top right:** Facing south. **Second from bottom left:** View from dune. **Bottom:** Entrance court (All photographs courtesy of Pierre Swanepoel architect, 2012).



Figure 8.39. Views of the house as built. **Top left and middle and bottom left:** Main living area and kitchen with mezzanine loft over. **Top right:** Living area to main bedroom. **Bottom right:** Main bedroom (All photographs courtesy of Pierre Swanepoel architect, 2012).

8.6. Summary

Fagan's design process is a rational pursuit that is initially divergent with nuances of convergent thinking. Later design development processes become convergent through Fagan's use of tried and tested typological solutions. This method of working does not dilute the uniqueness of solution that is aptly suited to each site and program.

Fagan mediates 'external' and 'internal' design influences to deal with the exigencies of site and program, his education and life experiences. These include the influences of the Cape vernacular tradition, the mediated Modern Movement education at the University of Pretoria, the design of the Volkskas banks and years of conservation work.

Chapter 9

FORMAL TENSIONS AND MEDIATIONS



House Die Es (1965), House J.J. Fagan at McGregor (2008), and House Swanepoel in Hermanus (1991) (all Author, 2008).

This section outlines the heterotrophic nature of Gabriël Fagan's architecture and describes the formal tensions and mediations that occur in his work.

It builds on the descriptions of heterotopia outlined in Chapter Two.

The heterotrophic responses will be described as a series of polarities:

Science and experience

Form and context

Space and place

Form and function

Technology and form

The concept of heterotopia was introduced in Chapter 2. The main feeders for Fagan's architecture are the inherited vernacular tradition and a mediated Modern Movement (as outlined in Chapter 7). Fagan's architectural language is sustained by these two sources and in the process fosters the long-term sustainability of both influences. Commonalities such as the rectangular and attenuated form of both traditions are set against oppositions such as introverted and extroverted spatial arrangements. The resultant form is expressive of these mediations through a process of conversion and assimilation, but the architectural result does not sit at the extremes of its informants; it engages both, and in the process creates a divergent and innovative architecture.

The new architecture speaks of difference and in a way pre-empts Venturi's Post-Modern retort to "less is more" with "less is a bore" and his call to employ architectural strategies of complexity and contradiction. It is an architecture that is inclusive as it builds on a history of regional approaches, and is also reactive as it fosters a new tradition. It results in architectural form that is recognisable and historical but also new and timeless. Tensions present themselves as contradictions in the architectural form, organization and detailing of Fagan's domestic architecture. No sooner are the rules²³⁵ set when they are broken and it is perhaps the physical and experiential recognition of these tensions that creates uniqueness in his architecture.

Fagan acts as the mediator in this process of conversion and assimilation. His life experiences act as the filter for the reinterpretation of traditional influences on the one hand, and the exigencies of the context and brief on the other. Although the following sections will highlight the resultant formal mediations it needs to be recognised that Fagan does not adopt these strategies singularly or consciously. It is for the purposes of analysis that each mediation is extracted and analysed separately. It is also not the intention to formulate Fagan's approach as reductive. Fagan adopts many of these approaches in an unconscious manner and it is the mediation between all of these formal considerations that fosters a unique architectural solution each time a new project is undertaken.

9.1. SCIENCE AND EXPERIENCE

Architecture has another meaning and other ends than showing construction and responding to needs (and by needs I mean comfort, practicality and comfortable arrangement). Architecture is the art above all others which achieves a state of platonic grandeur, mathematical order, speculation, the perception of harmony which lies in emotional relationships. This is the aim of architecture (Fagan, 1969:3).

Fagan's technologically inventive childhood and sensitivity to context provide a sound platform for

— ²³⁵ The 'rule' can be described as a reflection of the principles of both modernist and traditional typologies. It is almost as if the 'rule' presents itself as a tribute to the principles of the past and is then manipulated into a new language.

the reconciliation of the polar informants of architectural design, namely art and science, the latter over-emphasised during the Modern Movement. Fagan mediates both these informants through the use of familiar elements and spatial experience. To foster a connection with and build on tradition, Fagan creates a synthesis between the white modernist box form and traditional Cape architectures through the use of elements such as the chimney and sheltering roof. Tradition and the necessities of modern life are recognisable aspects of Fagan's new typologies. These typologies pay respect to tradition but are inventions more than imitations. Spatial experience is a mediation of both the Cape sequence of arrival and the Corbusian architectural promenade. Fagan's initial more formal use in his parents' House Keurbos (1951) is later tempered to a more place bound and experiential route at Die Es (1965) (see Fig. 9.1) and House Raynham (1967). The route in House Auldearn (1992) begins at the entrance gate, meanders under the kitchen block and into a car court from where the house is entered from below. The rising staircase meets the partly glazed front door and on stepping through it the visitor is turned to the left to enter the living room with its distant views of the surrounding hills. In House Patterson (1966) (see Fig. 9.1) an upward spiral route leads the visitor from the street down a long driveway to a ceramic mural with the front door placed at ninety degrees. On entry the visitor is turned to face the opposite direction where a staircase leads to a mezzanine study and views of False Bay. A similar spiral route is used in House Levin (1970) (see Fig. 9.1).

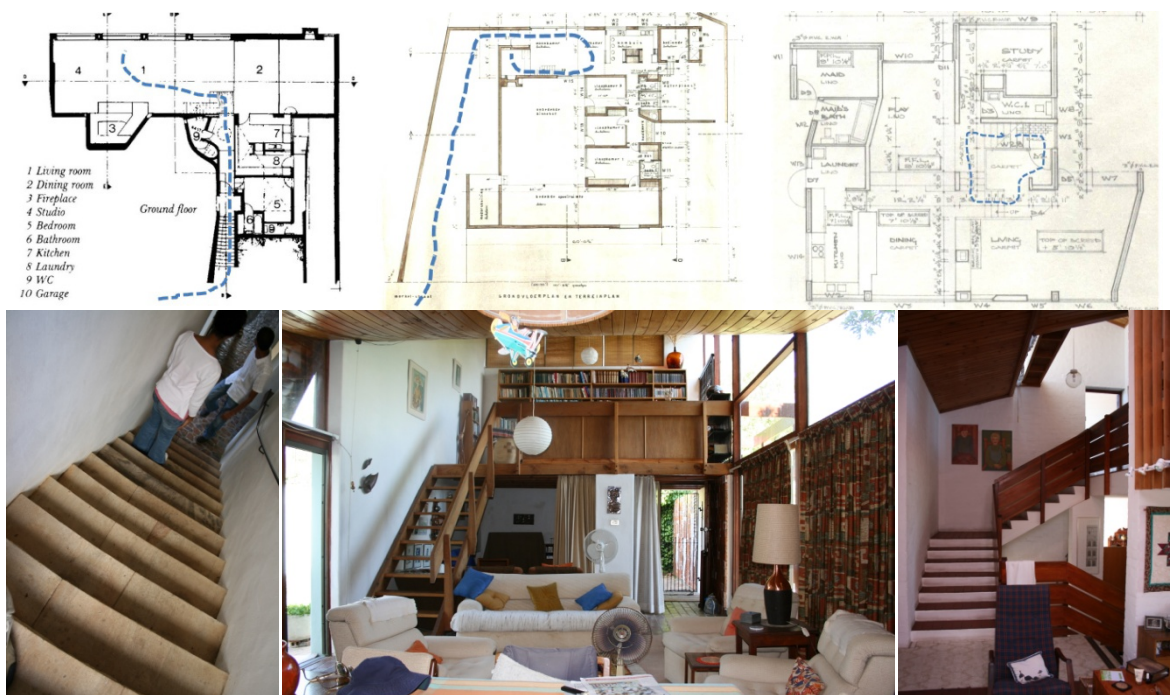


Figure 9.1. Left: House Die Es (1965) ground floor plan (Fagan, 2005a:27) and view down entry stair (Author, 2009) Middle: House Patterson (1966) ground floor plan (Fagan archive - Job No. 655, undated) and view to mezzanine from dining area (Author, 2009). Right House Levin (1969) first floor plan (Fagan archive- Job No. 6910, 24/7/1969) and view of central stair (Author, 2009).

The designs are grounded more "in experiential qualities than a priori formal values" (Constant, 2007:148) and recall Le Corbusier's proposal for his parent's house on Lake Léman and Eileen

Gray's development of the modern idiom in her 1934 Tempa à Pailla in the Mediterranean port of Menton (see Fig. 9.2). Herbert (1975:209) makes a similar point when he describes a Gray and Badovici house at Cap Martin at Roquebrun as a synthesis of an intellectual architectural approach with sensitivity to the instinctive emotional needs of the occupants. Fagan's sketch of Die Es (1965) bears many similarities in spatial definition, experience and movement (see Fig. 9.2).

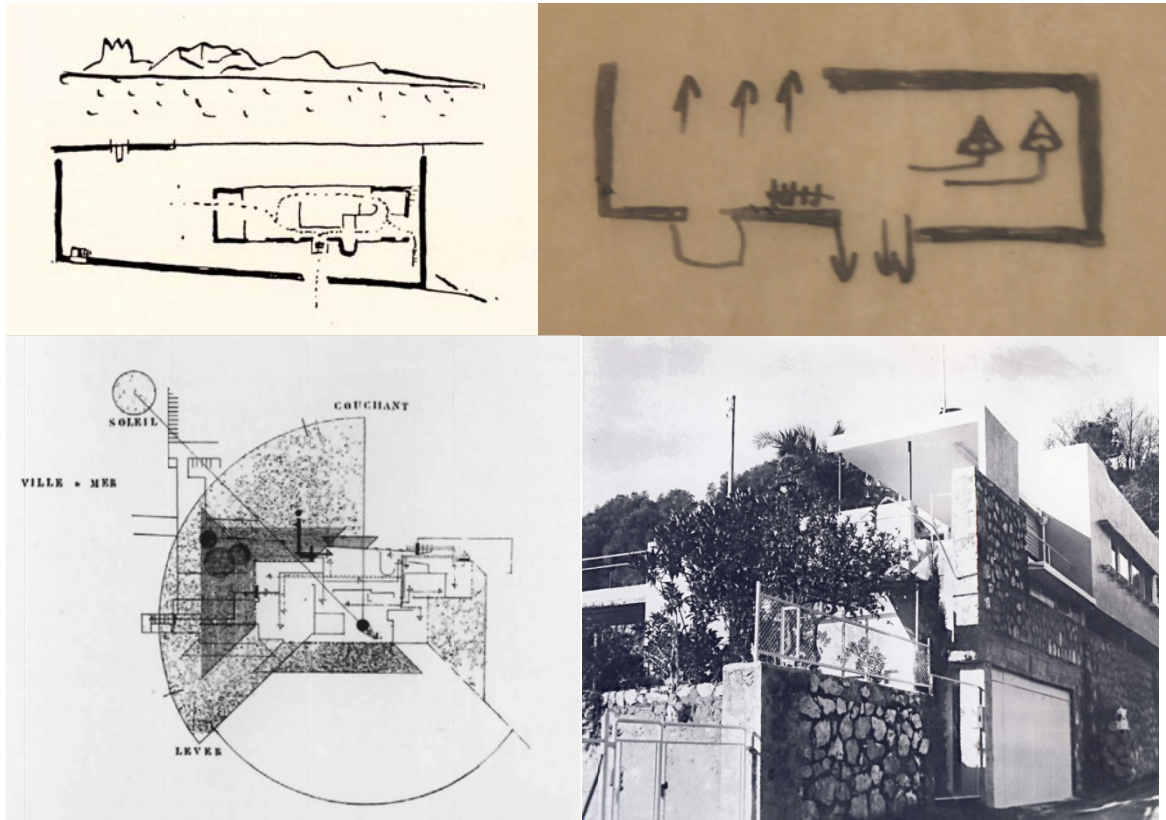


Figure 9.2. Top left: Le Corbusier's sketch for petite villa on Lake Léman showing circulation routes and enclosure (Tzonis, 2001:68). Top Right: Fagan's sketch for Die Es (1965) also indicating movement and enclosure (Fagan archive - Job No. 656, undated). Bottom left: Plan diagram of Tempa à Pailla by Eileen Gray (1932-34) indicating movement routes in relation to the path of the sun (Constant, 2007:161). Bottom right: Street view of Tempa à Pailla (1932-34) (Constant, 2007:147).

9.2. FORM AND CONTEXT

[A]lthough a watch or car can be universally meaningful, yet District Six is not Bishopscourt, Cape Town is not Johannesburg, is not Pretoria, because the evolution of a city depends not so much on technology as [on] a continuous human response to place, to the past, the present and a vision of the future (Fagan, 1972:1).

Fagan has remarked that his search for form is based on aspects of cultural and physical context, the former through an association with the principles of traditional architecture through Barrie Biermann's influence and years of restoration work, the latter through an understanding of place and all its physical influences.

Sy oorspronlike ontwerpe staan ook hoflik beskroomd teenoor hulle omgewing sonder dat hulle eie waardigheid inboet (Biermann, 1975:1).

[His original designs also stand timidly and politely in their environment without giving up their own integrity]

But this search for form is guided by a functionalist and rationalist training balanced by a haptic sensibility. St. John-Wilson's (2007:114) explanation of the 'other tradition of modern architecture' highlights these aspects:

The sense of history, of *genius loci*, informs and suffuses the design with a poetic sensibility that is totally absent in the Cartesian abstractions of the International Style.

Fagan synthesises these polar concerns through a series of formal relationships explained in the sections that follow.

9.2.1. Classic modernism/Organicism - Geometric/Organic

The 1932 International Exhibition of Modern Architecture held at the Museum of Modern Art in New York endorsed the idea of a regional or local modernism and predicted a shift from geometric to organic architecture (Pelkonen, 2009:170). In *Space, Time and Architecture*, Giedeon (1971:336) asserts that throughout history there have been two different ways of dealing with the environment – either through the geometric or through the organic. Fagan's modernist education was shaped by the regional orthodox slant of Hellmut Stauch as well as the built influences of Norman Eaton who was shifting to an African inspired architecture. The "Brazil Builds" exhibition²³⁶ and the work of Oscar Niemeyer exerted strong formal influences on Fagan.

Another Pretoria graduate, Karl Jooste, a lifelong friend of Fagan's, demonstrates a much more organic and dispersed formal approach in his work (see Fig. 9.3) and when Fagan was asked why his work did not follow the same Modernist mediation he replied that the context of the Transvaal landscape dictated a more amorphous formal approach. Fagan's organic mediations are inspired by both Le Corbusier's free plan and the plastic nature of Cape traditional architecture, but these influences are limited by Fagan's reliance on a synergy of traditional and Modern Movement rectangular plan forms and the dominance of the singular object. Frampton asserts that Fagan's architecture is "in its spatial and structural aspects as organic as it is tectonic" (2007).

– ²³⁶ The "Brazil Builds" exhibition of 1943 documented South American Modernism and showed the positive influence of climate and context on a universal architecture. The subsequent book of the same name by Kidder-Smith found much favour in South Africa due to the similarities in climatic response.

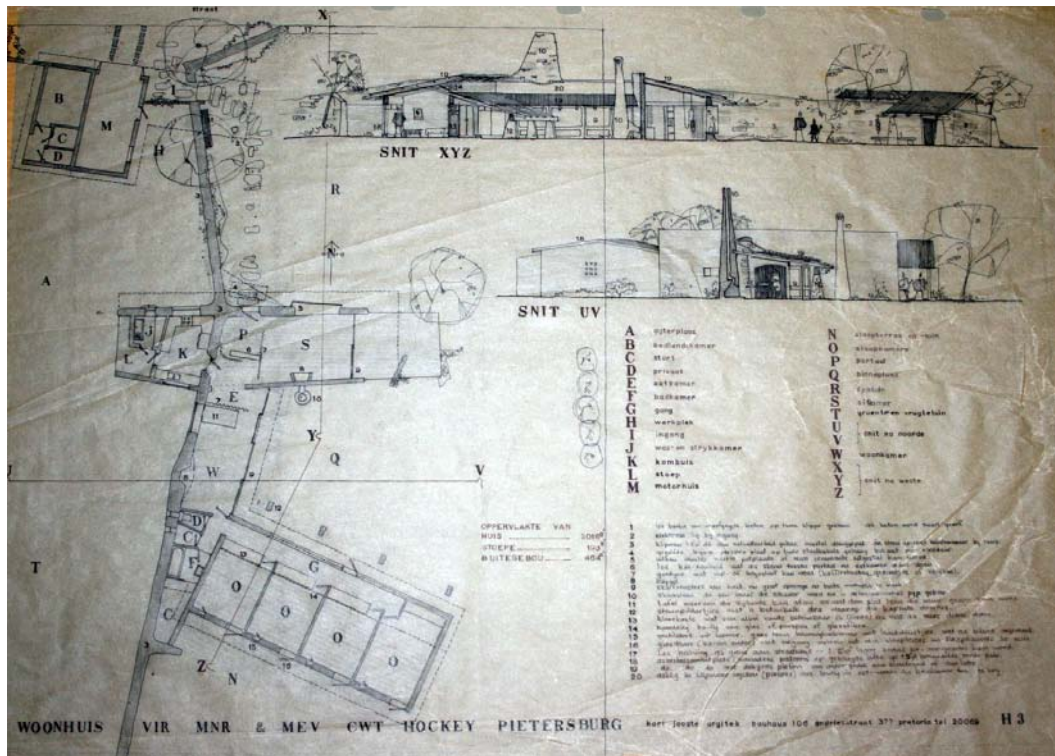


Figure 9.3. House Hockey, Pietersburg, Karl Jooste, undated (National Cultural History Museum, Pretoria).

Organic responses within the dominant geometric organizations of Fagan's buildings are guided by contextual influences, functional requirements, or a respect for tradition. Forms mould to their physical contexts such as House Swanepoel (1980) in Cape St. Francis's dune like roof shape (see Fig. 9.4), while external walls morph in shape, height and ground connection in House Raynham (1967) (see Fig. 9.4), House Swanepoel in Hermanus (1990) and at Die Es (1965) (see Fig. 9.4). Fagan (1985:7) remarks on the Cape St. Francis house:

The holiday house that I showed – earlier, the walls follow a rather different but again organic pattern ... as in our traditional architecture the truth is fully visible.



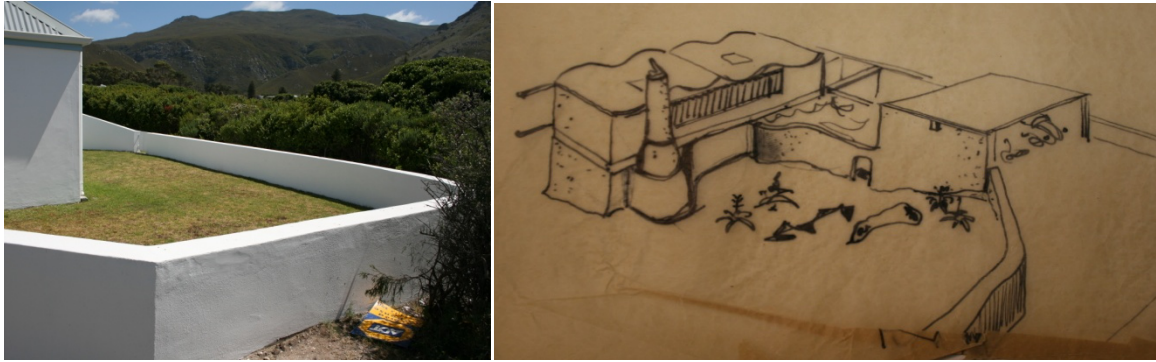


Figure 9.4. Previous page left: Moulded roof to House Swanepoel in Cape St. Francis (1980) (Fagan archive - Job. No. 8011, undated). **Previous page right:** External walls rise and fall to meet roof profile (1967) (Author, 2008). **Left:** Enclosing boundary wall at House Swanepoel in Hermanus (1990) (Author, 2008). **Right:** Fagan's preliminary sketch for Die Es (1965) showing organic walls and chimney (Fagan archive - Job No. 656, 1964).

Special spaces or elements are often given significance through a Corbusian organic manipulation. This is most clearly seen in the chimney room in Die Es and the subtle curves in bathroom walls in House Keurbos (1951) (see Fig. 9.5). Early organic elements (such as the niche at House Keurbos) (see Fig. 9.5) are more inspired by Le Corbusier and are more internal but there is a later shift to a total organic form. The latter part of Fagan's career seems to have limited formal organic expression, Fagan relying on spatial flow to counter a strict linear geometry.



Figure 9.5. Left: House Die Es (1965) organically shaped chimney (Author, 2009). **Middle:** Curved wall of lower ground floor bathroom to House Keurbos (1951) (Author, 2009). **Right:** Niche to living room of House Keurbos (Author, 2009).

9.2.2. Cape and Mediterranean

Le Corbusier's Chilean house for M. Errazuris (see Fig. 9.6) marked a departure in his domestic oeuvre through the use of traditional Mediterranean methods of construction. This was preceded by Villa Hélène de Mandrot in 1928 (see Fig. 9.6) where Le Corbusier used the Mediterranean stoa and cubic forms as well as the bare terrace (Tzonis, 2001:116) to produce one of his first regionalist pieces. Fagan has drawn on these influences to attain, as Frampton (2007) remarks, "an unexpected synthesis between the white plastered tradition of the Cape and the plasticity of the Mediterranean vernacular".

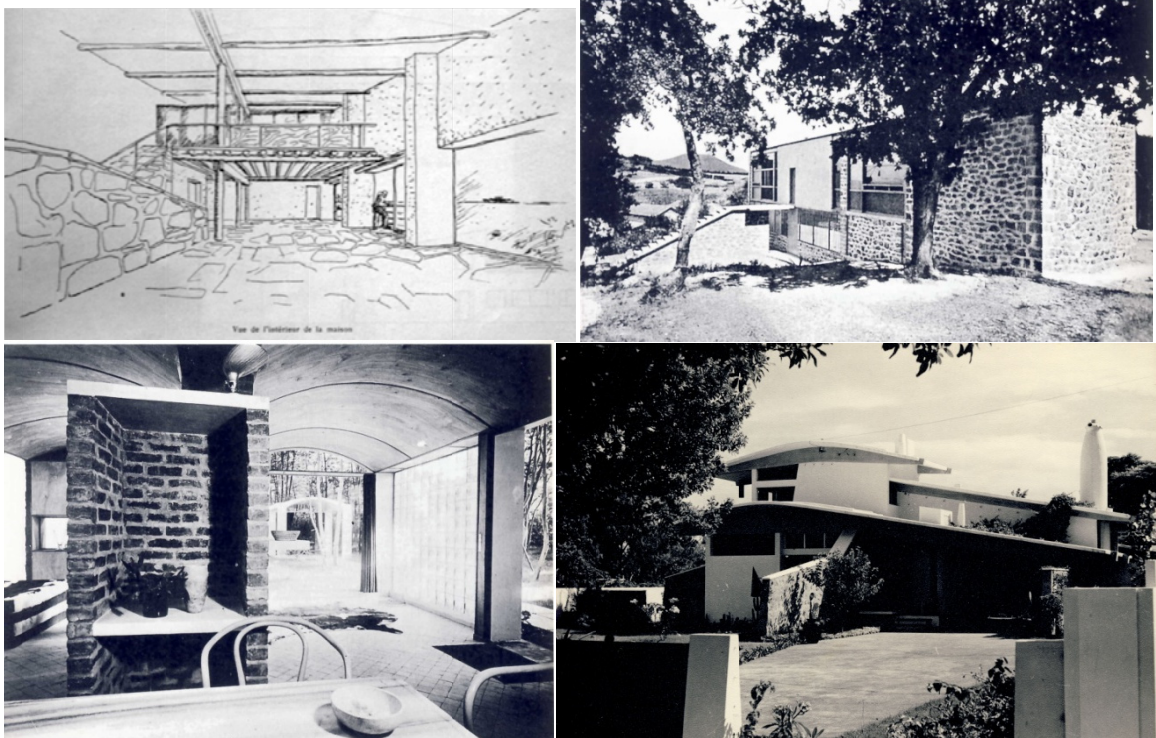


Figure 9.6. **Top left:** Le Corbusier and Jeanneret's proposal for Maison Errazuris, Chile (1930) (Le Corbusier et Jeanneret, 1943: 49). **Top right:** Le Corbusier and Jeanneret's house for Madame Mandrot, near Toulon, France (1931) (Frampton, 2001:134). **Bottom left:** Interior of Le Corbusier and Jeanneret's Maison de Week-end, La Celle-St-Cloud (1935) (Frampton, 2001:136). **Bottom right:** Fagan's photograph of Guedes's Aeroplane House in Lourenço Marques (1951) (Fagan, 1955:image 42).

Fagan's architecture finds synergy with the work of the Portuguese Mediterranean architects Alvaro Siza (see Fig. 9.7), in the use of the contextually manipulated white wall, and Pancho Guedes, in the use of the flattened barrel vault and exaggerated chimney. The barrel vault recalls those on the Cape farm Meerlust (Fagan, 1983:6), Le Corbusier's de Week-end in La Celle-St-Cloud (1935), and Guedes's Smiling Lion in Maputo (1958)²³⁷ (see Fig. 9.7). Fagan has indicated (2008b) that the properties of thermal mass offered by this type of construction makes it suitable for the Cape. The limitations of construction, though, create awkward tensions with the modernist ideals of the free plan. The most synergic relationship was established at Die Es, where limited wall linkages of a syncopated roof (a 'development' of the barrel vault) provide planning freedom and external connection. This house also demonstrates a tectonic similarity to Semper's description of the Caribbean hut²³⁸ (see Fig. 9.7).

– ²³⁷ Fagan had visited Lourenço Marques in 1955 (shortly before the construction of Smiling Lion) while working for Volkskas and documented a series of Guedes buildings (see Chapter 6.3.1).

– ²³⁸ See Chapter 2.6.3.

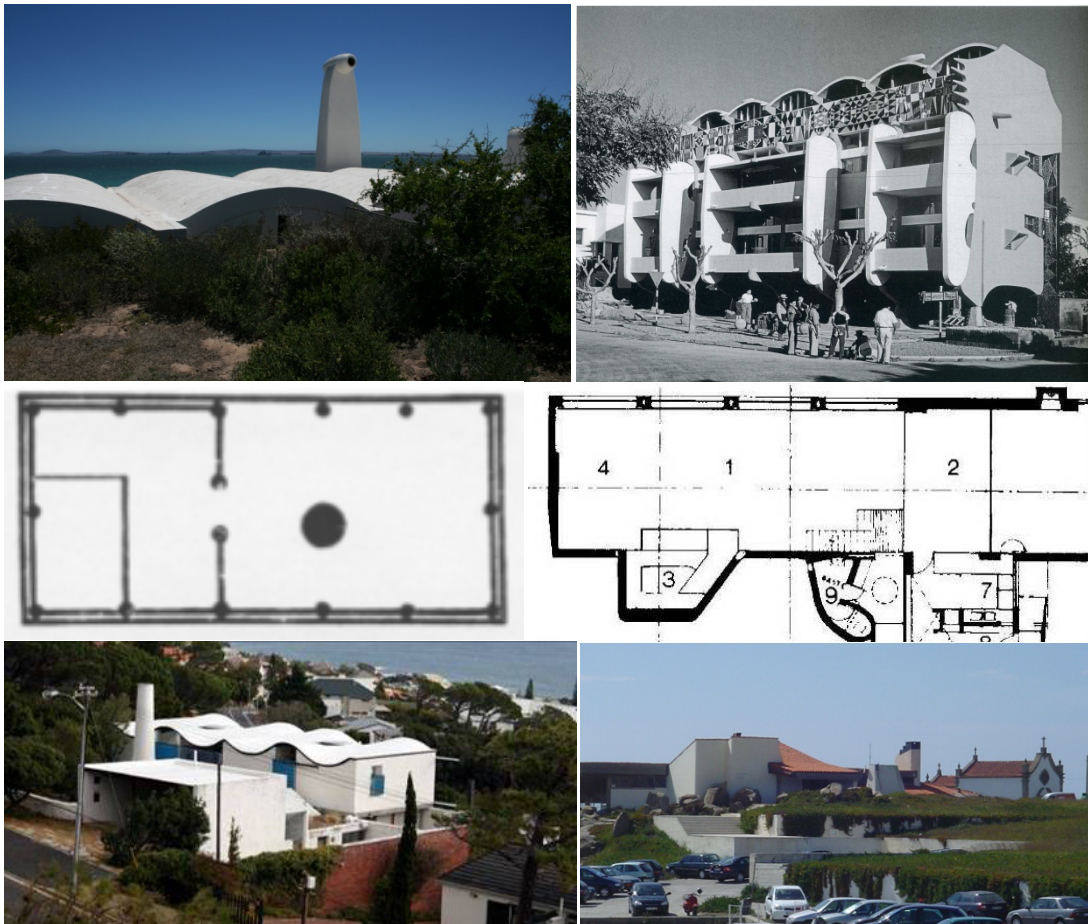


Figure 9.7. **Top left:** View of barrel vaulted roof to House Paradys (2003) showing similar form and chimney to that of Guedes's Smiling Lion (Author, 2009). **Top right:** Guedes's Smiling Lion in Lourenço Marques (1958) (Guedes, 2009:98). **Middle left:** Semper's plan of the Caribbean hut showing central hearth, ordered bays and part enclosure (Semper & Mallgrave, 1986:2). **Middle right:** Part plan of House Die Es (1965) showing similarities to Semper's diagram through regularised bays and part enclosure but with shifted chimney position. **Bottom left:** View of syncopated roof of Die Es (1965) (Author, 2008). **Bottom right:** Alvaro Siza's Boa Nova restaurant in Porto, Portugal (1963) influenced by the local Mediterranean (Author, 2004).

9.2.3. Classic and romantic relationships with the landscape

The orthodox modernist universal form is most often recognizable as a simple box, dominating its landscape. In a sense it is analogous with the traditional Cape typology, a result of the inherited Dutch Classical tradition. But a formal tension exists in many of Fagan's houses. The oftentimes 'independent' box forms are connected to the earth by low walls, sunken garages or subtle wall/ground transitions. Fagan explains:

I don't think the yard walls are related to the Cape werf [yard], except to the extent that they extend the presence of the house, form an introduction and lead to the entrance (Fagan, 2008e).

The houses thus mediate between formal independence and contextual connectedness. Alvar

Aalto's more horizontal mediations have been commented on by Joedicke and supported by Fagan (2010a):

He sees the works of nature and man as complimentary, with buildings, having their own independent place in this relationship (Joedicke, 1969:164).

Fagan's approaches alternate between formal independence and contextual reliance. In die Es (1965) (see Fig. 9.8) the Modern Movement box attempts to release itself from its formal restraints by the floating roof while grounding itself through the coved wall-ground connection. At the same time it is also subtly grounded by the coved skirting, garden walls and large chimney base. The floating nature of House Bertie-Roberts (1966) is countered by the retaining walls of stone (see Fig. 9.8). In House Raynham (1967) the submerged garage and concrete retaining wall anchors the building, while the partly suspended ramp and punctured roof provide spatial release. Fagan employs a similar grounding strategy in the McGregor house (2005) (see Fig. 9.8).



Figure 9.8. **Top left:** Stone retaining wall at House Bertie-Roberts, Camps Bay (1966) (Fagan archive - Job No. 644, undated). **Top middle:** House Die Es (1965) showing junction with ground (Author, 2009). **Top right:** Die Es, Camps Bay, (1965) still under construction (Fagan archive - Job No. 656, undated). **Bottom left:** House J.J. Fagan, McGregor (2005) (Author, 2008). **Bottom right:** House Raynham, Newlands (1967) (Author, 2008).

9.2.4. Static - dynamic

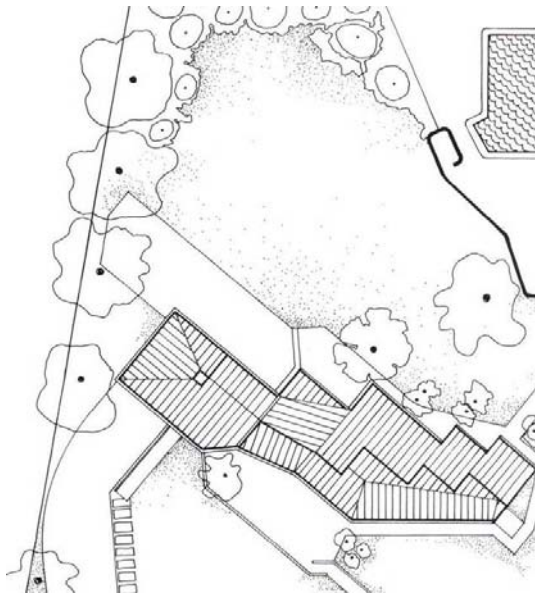
Fagan has manipulated, reinterpreted and extended the plastic nature of the Cape tradition. Initial and limited explorations in House Keurbos (1951) through wall finish, rounded corners and an external niche reached full maturity in House Raynham (1967) where the entire built form becomes

a plastic entity as walls and roof are moulded to respond to site conditions, entry and internal organization. Fagan alternates between surface and formal plastic solutions.

The plastic quality of wall finishes is extended by Fagan to encompass the totality of the walls as they step and slope to respond to functional or contextual requirements. The response of the roof to the meandering wall pattern extends the plastic response and it is as if the entire built form is moulded. A tension is created between a 'moving' form and static grounding elements such as the chimney externally at Die Es (1965) (see Fig. 9.9), and internally in a twisted version in House Neethling (1983) (see Fig. 9.9), as well as the subterranean garage or boundary wall. Although Fagan's architecture moves away from the static nature of the modernist box the dominance of overall form is still retained.

A further plasticity is achieved in the shifting nature of internal spaces against the counterpoint of service elements that are often fixed. Buchanan describes the living room of Die Es (1965) (see Fig. 9.9):

In a single evening the room might change from being a sunny balcony of a solitary reader and then of a chatty gathering, later to become the auditorium for a performance on the stage-like dining area, and lastly a soft-lit backdrop to the family gathered around the fire.



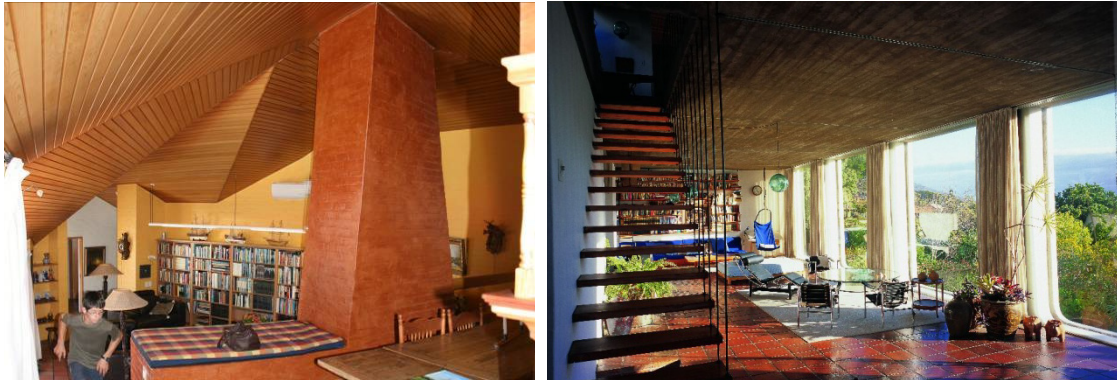


Figure 9.9. Previous page left: Plan of House Raynham, Newlands (1967) (Fagan, 2005:48). **Previous page right:** Chimney, Die Es, Camps Bay, (1965) (Author, 2009). **Left:** Fireplace to House Neethling, Durbanville (1985) (Author, 2009). **Right:** Living room, Die Es, Camps Bay (1965) (Fagan archive - Job No. 656, undated).

9.3. SPACE AND PLACE - Interior/Exterior, Identity/Territory, The womb/The world

We think in terms of 'being inside' or 'being outside' – in fact all our experiences lie at some point in a range running between these two extremes, each of which contains a potential state of panic: claustrophobia and agoraphobia ... and this traumatic change experienced in early childhood between two polar positions or modes of experience through which we all pass in infancy (St. John Wilson, 2007:104-105).

The epitome of universal modern architecture is the Miesian glass box where the line between interior and exterior space is visually blurred (see Fig. 9.10). A direct, monotonous and often climatically unsuitable relationship is established between space and place, with little mediation between inner and outer worlds. In contrast, the Cape tradition hid the inner world, and provided limited transition to the central room (see Fig. 9.10). Fagan notes (2008b) that thermal mass is essential for comfortable living in the Cape and that the glass box is not suitable for this setting. He uses a series of spatial, experiential and formal approaches to mediate the concerns of a comfortable indoor environment, external connection and thresholds.

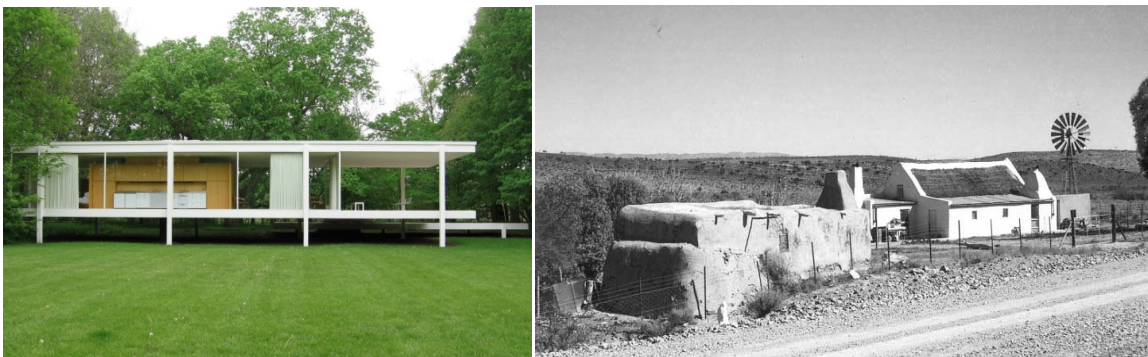


Figure 9.10. Top left: Mies van Rohe's Farnsworth house, Plano, Illinois (1946 to 1950) depicting synergous relationship between inside and outside space (http://www.greatbuildings.com/cgi-bin/gbi.cgi/Farnsworth_House.html/cid_1176264517_20050610_134119_farnsworth_mies.html [Accessed 06/05/2012]). **Top right:** Vernacular Karoo houses constructed to deal with the exigencies of climate (Fagan 2012b).

9.3.1. Approach/Entry

The arrival and approach at most Cape vernacular buildings are direct but nonetheless experiential. Fagan (1985:5). describes the approach to Groot Constantia as “unfolding” through the layered and axial entrance and later expresses that anything that he would do after this would be bathos. But he also notes that the lesson is not lost and that a similar unfolding principle is applied at his parents’ house in Bishopscourt (see Fig. 9.11). An atrium is used to mediate between inner and outer worlds, while at Die Es (1965) (see Fig. 9.11) he uses principles of axial unfolding, hiding and revealing. At House Swanepoel in Hermanus (1990) (see Fig. 9.11) a winding route from below takes the visitor to internal light sources from rooflights adjacent to the chimney and over the internal courtyard. In House Auldearn (1992) (see Fig. 9.11) the route begins at the driveway entrance with its retaining walls and leads under the kitchen service wing to a car court. An entrance stair punctures upwards through the service wing to arrive at the front door. These principles are aligned with Corbusian notions of movement through space but are extended to encompass the full spectrum of experience.



Figure 9.11. Top left: Living room ramp, House Keurbos (1951). **Top right:** Entrance stairs, Die Es, Camps Bay (1965). **Bottom left:** House Swanepoel, Hermanus (1991). **Bottom right:** House Auldearn, Elgin (1992) (all Author, 2009).

9.3.2. Entry: vehicular – pedestrian

The conflicting requirements of vehicular and pedestrian entry are resolved in most of Fagan's houses through one access point in order to avoid "a confusion of entrances that exist in many suburban houses. "Why have split paths to your front door?" (Fagan, 2009a).

But the approach to dual entrances varies. In some instances the garage is suppressed as in Fagan in McGregor (2005) (see Fig. 9.12); in others the front door and garage are joined (Houses Paradys (2003), Swanepoel in Hermanus (1990), Keurbos (1951) (see Fig. 9.12) and Blommaert (1982) or the house is entered from below as at Houses Bertie-Roberts (1966) and Auldearn (1992). In most cases though, the garage is made a part of the house to subscribe to the singular form of the modernist box and the Cape vernacular. A function, which in the old tradition was seen as separate and perhaps in the modernist tradition as subservient (but connected), is now given direct internal connection.



Figure 9.12. **Top left:** House J.J. Fagan, McGregor (2005) (Author, 2008). **Top right:** House Paradys, Langebaan (2003) (Author, 2009). **Bottom left:** House Swanepoel, Hermanus (1990) (Author, 2009). **Bottom right:** Keurbos, Newlands (1951) (Author, 2008).

9.3.3. Front and back - Spatial and aesthetic duality

Glass doors on the garden side allow the street face to remain intact (Fagan, 1976:3).

Fagan's houses exhibit a tension between back and front through the disposition of openings more

closely related with function than form, and quite often dictated by the location of service elements at the entry side of the house and living spaces to the north or private garden edge. This strategy provides privacy from the world and contact with a private outer world. It mediates between the containedness of the traditional model and the monotony of the universal example, while still maintaining a coherent entry façade with the entrance more peripherally than centrally placed. It is perhaps an extension of Renaissance principles such as those applied by Palladio at Villa Foscari, and of Le Corbusier's "interpretation" in Villa Garches. It also establishes a Mediterranean connection in the stoa type layout and echoes Le Corbusier's Petite Villa Au Bord Du Lac Léman of 1925. At Die Es (1965) (see Fig. 9.13) the woven carport wall partially hides the sea view beyond, while street facing walls are without punctures at ground level save for a slit window hidden behind the external fireplace facade. The purposeful solidity of the street edge hides the sea view and heightens the internal experience as the views are revealed through the large floor to ceiling glazing on the ground and first floors. House Brink (2002) (see Fig. 9.13) is similar in its approach, with few street facing openings and extensive sea facing glazing to the underside of the curved ceilings.



Figure 9.13. Top left: East edge, Die Es, Camps Bay (1965) (Author, 2008). **Top right:** West edge, Die Es, Camps Bay (1965) (Author, 2008). **Bottom left:** East edge, House Brink, Langebaan (2002) (Author, 2009). **Bottom right:** West edge, House Brink, Langebaan (2002) (Author, 2009).

9.3.4. Thresholds and boundaries

A boundary is not that at which something stops but, as the Greeks recognized, the

boundary is that from which something begins its presencing. A boundary may also be understood as a threshold, that is, as an embodiment of a difference (Norberg-Schulz, 1983:66).

Fagan's houses respect both the local Cape vernacular and orthodox Modern Movement notions of limited spatial layering between inside and outside. When Fagan was questioned about why his houses do not have external covered terraces he remarked that that was not a Cape tradition. Fagan has formulated a unique solution to achieve appropriate climatic layering between inside and outside while maintaining the formal principles of the inherited typologies.

When the doors in my house in Camps Bay slide away, the house becomes the 'stoep' (Afrikaans for outside terrace) (Fagan, 2009).

Fagan achieves threshold connections by providing terraces or courts that sit within the overall form. House Swanepoel in Hermanus (1990) has two conditions (an internal court and an enclosed terrace) (see Fig. 9.14). A similar approach can be seen in the external shower spaces at House Keurbos (1951), and Houses Neethling (1983) (see Fig. 9.14) and Swanepoel in Hermanus (1990). The Keurbos atrium is the largest of the thresholds, extending through the house.



Figure 9.14. **Top left:** Living room, Die Es, Camps Bay (1965) (Author, 2008). **Top right:** House Swanepoel, Hermanus (1990) (Author, 2009). **Bottom left:** Main bathroom and court before a 2009 modernization, Keurbos, Newlands (1951) (Author, 2008). **Bottom right:** House Neethling, Durbanville (1985) (Author, 2008).

9.3.5. Introverted – extroverted

The modernist notion of space that blurs the relationship between inside and outside is best seen in houses by Mies van der Rohe and Philip Johnson²³⁹ (1906-2005). The Cape vernacular tradition is, in spatial terms, an introverted architecture with small window openings tempering the extremes of the Mediterranean climate. In Fagan's houses the dominance of wall architecture is respected but tempered through the contextual requirements of view as in *Die Es* (1965) and *House Raynham* (1967), solar penetration in *House Swanepoel* in *Hermanus* (1990), and external access in *Houses Raynham* (1967), *Swanepoel* in *Cape St. Francis* (1980) and *Blommaert* (1982) (see Fig. 9.15). Often a corner window or door is employed to mediate the spatial dichotomies, thus maintaining a clear dominance of wall in each of the room edges. This was the generator for *House Beyers* (1998), where diagonal views towards the sea and mountain are captured (see Fig. 9.15). But the introverted spatial quality of the living space contradicts this notion. Perhaps the academic background of the clients required a more focussed interior. Fagan thus mediates the sheltering nature of the vernacular tradition and the necessities of modern life and contact with the outside. The organization of *Die Es* (1965) alternates between the open plan of the living areas and the cellular nature of the bedrooms. Fagan, (2008c) refers to Le Corbusier's *La Tourette* as inspiration.

Paul Rudolph (1957:16) argues for 'caves' as well as goldfish bowls in architecture and further on (1957:17) he describes the use of flexible wall panels:

If you desire to retire from the world you have a cave, but when you feel good there is the joy of the open pavilion.

The Japanese architect Tadao Ando comments on his own architecture:

And I suppose it would be possible to say that the method I have selected is to apply the vocabulary and techniques developed by an open, universalist Modernism in an enclosed realm of individual lifestyles and regional differentiation. But it seems difficult to me to attempt to express the sensibilities, customs, aesthetic awareness, distinctive culture, and social traditions of a given race by means of an open, internationalist vocabulary of Modernism (Frampton, 1983:158).

Fagan prefers to define three edges of his buildings with walls and limited punctures. The initial enclosed nature of the living space to *House Raynham* (1967) was altered by the owners, who requested the addition of a window to the south-western wall (see Fig. 9.15). But Fagan's spatial definition echoes the sentiments of the academic, Danie Theron, who remarked (2008) that spaces should have "at least two windows on different walls to architecturally mark the passage of day [to] reveal different prospects".

– ²³⁹ See Appendix J.



Figure 9.15. **Top left:** House Swanepoel, Cape St. Francis (1981) (Fagan archive - Job No. 8011). **Top middle:** House Swanepoel, Hermanus (1991) (Author, 2008). **Top right:** Window added to House Raynham, Newlands (1967) (Author, 2008). **Bottom left:** House Raynham, Newlands (1967) (Author, 2008). **Bottom middle:** House Beyers, Betty's Bay, (1998) (Author, 2009). **Bottom right:** House Blommaert, Stellenbosch (1982) (Author, 2009).

9.4. FORM AND FUNCTION (The art of architecture/The art of living; The poetic and the practical)

The qualitative aspect of man's habitat is not just defined as the function of a watch or a car – therefore it is a dangerous illusion to believe that our habitat should be moulded in the image of a predetermined scientific order. Unfortunately our age is split between human content and human objectivity – art and technics (Fagan, 1972:1).

The post-modern cry for the return to an architecture of meaning resulted in part from the failure of the Modern Movement to address the very needs it set out to address. Architects like Venturi who called for architecture of complexity and contradiction saw that man had become disassociated from his architecture. "Modernity has often been described as a condition of 'homelessness' ... Modernity frees people from the limitations imposed on them by their family or clan or by their

village community, offering them unheard of options and often material improvements as well; there is, however, a price to pay. The renunciation of the traditional frame of references for their lives means of loss of certainties and of meaning. For many people it is far from easy to learn to live with this” (Heynen, 1999:14).

At the turn of the century, the house with all its separate rooms was in a process of shrinkage due to costs and other factors. A reaction set in and the ever diminishing rooms were replaced by a new concept of continuous space – the open plan. Boundaries between spaces for different activities – often conflicting ones – broke down with the new enchantment of space flow and its exciting, purely abstract, qualities. This has caused serious breaches of that prime human need – privacy. Both the family group as a whole and the individual within the small environment of the group has suffered. Recognition of the factors of noise, modesty, meditation and introspection is basic within even the most close knit family (Meyer, 1965:18).

Fagan mediates between the concerns of a functionalist architecture and the loss of meaning through an association with the principles of tradition appropriate for our current condition. Fagan has sought to retain the formal principles of the vernacular tradition but to mould these to suit modern planning and spatial requirements. Similarly he tempers the flexibility of the modernist plan with traditional cellular manipulations. Spatial continuity is assured internally but universalist monotony is downplayed through internal spatial manipulation.

The plan (of Die Es) is as simple as that of a Cape Dutch house and the complexity lies rather in the smaller spaces created within this framework (Fagan, 1985:12).

But there is a clear shift in mediation from houses such as Keurbos (1951), Bertie-Roberts (1966) and Levin (1969) where the rectilinear form is retained, to houses such as Raynham (1967) and Neethling (1983) (see Fig. 9.16) where the organization of space dictates the form and creates a moulded and uniform entity as it responds to contextual influences. House Fagan in McGregor (2005) (see Fig. 9.16) straddles the line between respect for traditional form and functional and contextual necessity, albeit in perhaps too formalistic a manner.



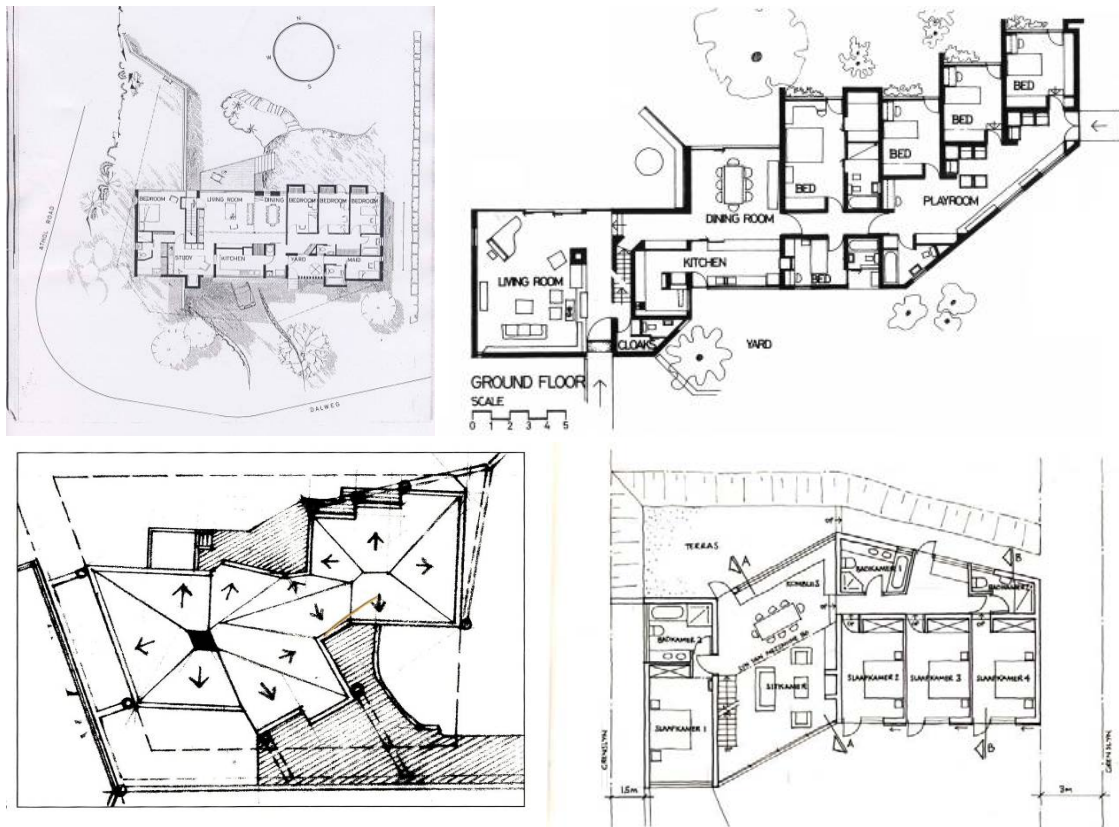


Figure 9.16. Previous page left: House Keurbos, Newlands (1951) (Author, 2009). **Previous page right:** House Levin, Langebaan (1969) (Author, 2009). **Top left:** Plan, House Bertie-Roberts (1966) (Anon, 1968:12). **Top right:** Ground floor plan, House Raynham (1967) (Fagan, 2005:52). **Bottom left:** Roof plan, House Neethling, Durbanville (1985) (Fagan, 2005:82). **Bottom right:** Ground floor plan, House J.J. Fagan, McGregor (2005) (Fagan archive - Job No. 0508, undated).

9.4.1. Frame and enclosure

Modern architecture separates and articulates elements. Modern architecture is never implicit. In promoting the frame and the curtain wall, it has separated structure from shelter (Venturi, 1966:35).

The Modern Movement shift from an architecture of integrated structure and enclosure to that of frame and skin created an entirely new formal aesthetic in the early 1900s. A technological and spatial impetus was instrumental in this regard but was nothing new. In fact, it could be regarded as a return to an ancient architecture echoing Semper's definition (1986:2) of architecture as being defined by four independent elements, all of which are recognisable in Fagan's architecture. His architecture mediates between the climatic need for thermal mass and spatial linkage by using the tectonic logic of a framed building, subsuming it within the traditional stereotomic model.

The spatial and organization similarities of Marcel Breuer's Stillman house (see Fig. 9.17) in Litchfield Connecticut in the United States of America (1950) can be seen in Fagan's 1966 Bertie-Roberts house (see Fig. 9.17) but its tectonic logic is tempered with a stereotomic layering. In House

Swanepoel in Cape St. Francis (1990) (see Fig. 9.17) Fagan juxtaposes a tempered stereotomic system with gum pole columns to support the roof on the sea-facing edge.

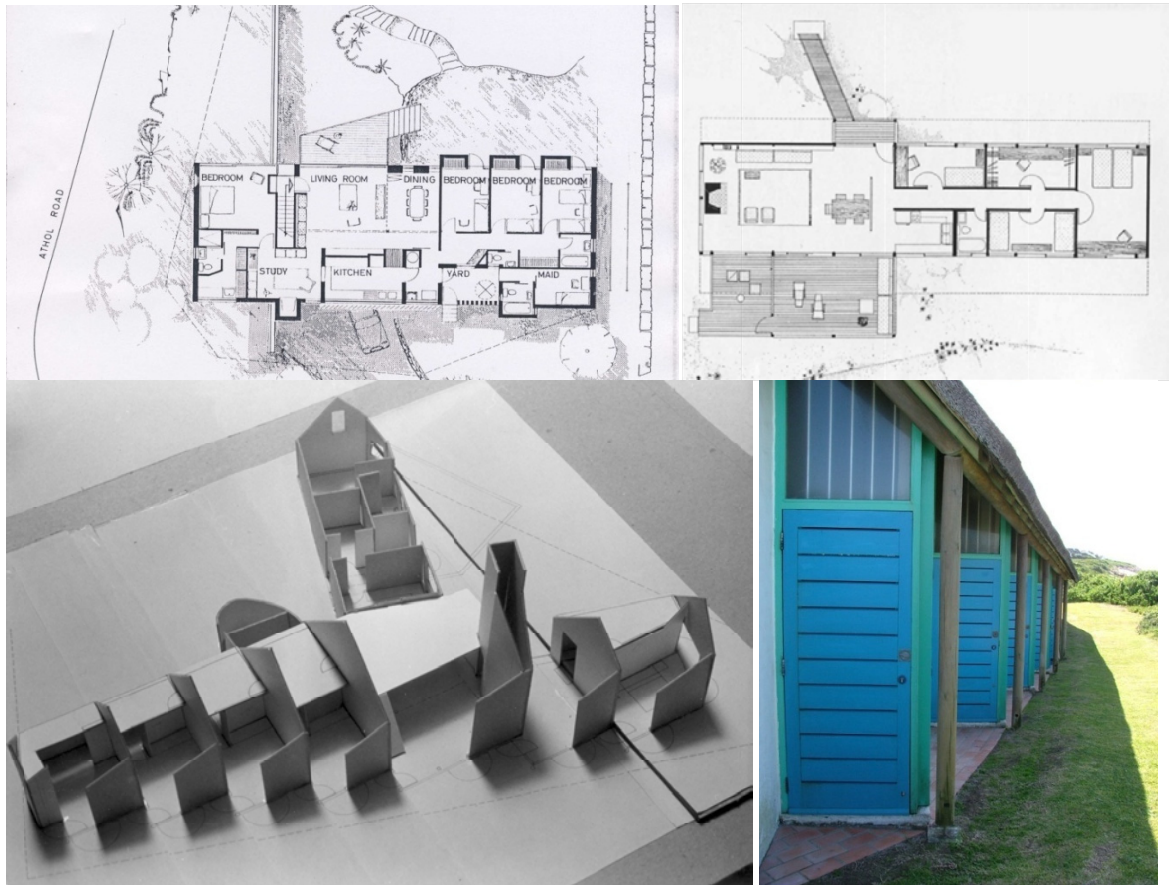


Figure 9.17. **Top left:** Ground floor plan, House Bertie-Roberts, Camps Bay (1965) (Anon, 1968:12). **Top right:** Plan, House Stillman, Massachusetts, Marcel Breuer (Breuer, 1962:151). **Bottom left:** Model, House Swanepoel, Cape St. Francis (1980) (Fagan archive - Job No. 8011, undated). **Bottom right:** Framed roof support, House Swanepoel, Cape St. Francis (1980) (Author, 2005).

9.4.2. Space and volume

I feel that today's house at least, calls for a certain inner complexity to provide for various moods (Fagan, 1983:9).

The Corbusian Dom-Ino system fostered a universal architecture that emphasized a definition of horizontal planes and limited volumetric variation. The traditional Cape model relied on mono-pitch or pitched-roof forms which emphasized a separation of ceiling void and internal space. In Fagan's houses the division between internal realm and ceiling void is mediated by a continuous ceiling plane that defines spaces and functional zones, while also providing an ever changing internal experience.

The tension between the wall and roof elements results in a dichotomy and hybridity of form that

prevents a spatial monotony while allowing flexibility in the use of space. This is most clearly seen in Houses Raynham (1967) and Swanepoel in Cape St. Francis (1980) (see Fig. 9.18), where ceilings are raised in living areas and dropped in bedroom and service areas, while still allowing enough room for the roof space to be used both functionally and environmentally. Fagan employs the same strategy in his holiday home Paradys (2003) (see Fig. 9.18), where the space over the passageway to the bedrooms is used as sleeping lofts for the children. This arrangement echoes those designed by Stauch for his own house, Hakahana (1959) in Pretoria (see Fig. 9.18). Fagan also juxtaposes small and large volumes, preferring larger and more open living spaces and tighter bedroom and service spaces. The volumes of his living spaces are always the largest and highest and echo the sentiments of Henry David Thoreau :

I sometimes dream of a larger and more populous house standing in a golden age, of enduring materials, and without gingerbread work, which shall consist of only one room, a vast, rude, substantial primitive hall, without ceiling or plastering, with bare rafters and purlins supporting a sort of lower haven over one's head, ... a cavernous house, wherein you must reach up a torch to see the roof; where some may live in the fireplace, some in the recess of a window, and some on settles, some at the one end of the hall, some at another, and some aloft on rafters with the spiders, if they choose; ... where you can see all the treasures of the house at one view, and everything hangs upon its peg that a man should use; at once kitchen, pantry, parlour, chamber, storehouse and garret – a house whose inside is as open and manifest as a bird's nest (Henry David Thoreau quoted in Rudofsky, 1977:274)





Figure 9.18. Previous page left: Playroom of House Raynham (1967) (Author, 2008). Previous page right: Loft space over passage to House Swanepoel in Cape. St. Francis (1980) (Fagan archive - Job No. 8011, undated). Left: Loft space over passage to House Paradys (2003) (Fagan archive - Job No. 0205, undated). Right: Loft space in bedroom of Hellmut Stauch's House Hakahana (1951) (Author, 2008).

9.4.3. Focus and function

Fagan has described the importance of the chimney as follows:

Lacking front gables as a signboard, and because the fireplace now functions apart from the kitchen (and also possibly because today a house is not always a home!) I have often built chimneys suggesting these traditional shapes, but rather placed the chimney in a predominant position to proclaim clearly the position of the hearth, in the heart of the house, as symbol of the home, of warmth and of the provision of food (Fagan, 1983:10).

In Fagan's houses, the Semperian notion of the hearth as one of the prime generators of built form takes on more meaning than in traditional Cape models, where the chimney was formed as an extension of the end wall (see Fig. 3.2). In Fagan's typologies it shifts from a position of engagement to one of importance, either internally to hold up the roof as in houses Raynham (1967) and Swanepoel in Hermanus, or, as in Die Es (1965) and Paradys (2003) (see Fig. 9.19), as a frontal piece expressive of what the gable used to represent. Its shifting position within each scheme provides the tension of recognition against unexpected placement. In House Beyers (see Fig. 9.19) the flue rises through the roof, retaining a formal independence as the roof supports itself on a steel collar.



Figure 9.19. **Top left:** House Fagan (Paradys), Langebaan (2003). **Top right:** House Raynham, Newlands (1967). **Bottom left:** House Swanepoel, Hermanus, 1991. **Bottom middle:** House Beyers, Betty's Bay, 1998. **Bottom right:** Die Es, Camps Bay, 1965 (All Author, 2009).

9.5. TECHNOLOGY AND FORM - Tradition/Technological invention; Simple technologies and sophisticated techniques

We must use technology to produce our own vernacular - an architecture where man who lives in the house is part of the design process. This will be an architecture of our technology and our varying ways of living – not an international architecture (Fagan, 1972:2).

The childhood influences of boat building, technological inventiveness, an engineering training, the years of conservation work and the development of these acquired attributes in Fagan's working career have allowed him to appreciate the properties and qualities of materials. But the simplicity of Fagan's technological solutions belies their inner complexity, richness and effectiveness. The new solutions rely on a synthesis of years of tradition and the possibilities inherent in new materials and

associated technologies.

The simple hinged shutter technology of the vernacular tradition (see Fig. 9.20) is elevated to new heights in the rotating versions first employed by Fagan in 1951 in his parents' house, Keurbos in Bishopscourt (see Fig. 9.20). This can be attributed to Fagan's natural talent for making, something that was partly inherited from his father and boosted by the encouragement and material support he received as a child. It was also influenced by a modernist architectural education in which issues had to be resolved from first principles.

And in detailing, Modern architecture has tended to glory in separation. Even the flush joint is articulated, and the shadow joint predominates ... significantly the column is favoured over the pier (Venturi, 1966:35).

Fagan's approach echoes Venturi's description above as the shutter never forms part of the window or the wall but is placed in true Modern Movement fashion as a separate planar element away from the wall surface. Rudolph (1957:17) describes the use of the shutter in New Orleans:

[It] might well become the common denominator between the old and the new, for each succeeding style has succeeded in using it in a fresh way.



Figure 9.20. **Top left:** Shutter to Non Pareille homestead, Paarl (1876) (Author, 2007). **Top middle and right:** Shutter opening mechanism and shutter to House Keurbos (1951) (Author, 2008). **Bottom left:** Shutter to main bedroom at Die Es (1965) (Author, 2008). **Bottom middle:** Sliding shutter to House Fagan in McGregor (Author, 2009). **Bottom right:** Hinged and ventilated shutter to House Paradys (2003) (Author, 2009).

There is also a tension in Fagan's houses between stereotomic architecture and the tectonic plane. Walls are most often treated as simple brick elements with little articulation save for a 'plastic' finish. Openings are the elements that are articulated and newly invented, and this play between a 'traditional' wall architecture and Modern Movement openings creates a unique formal tension.

Tog is sy eie ontwerpe allermens tradisioneel in die sin dat hulle behoudend voorkom. In hulle word nuwerwetse ruimtespel met ouderwetse vakkundigheid so onopsigtelik beklee dat die toekoms geredelik in die historiese kontinuïteit betrek word (Biermann, 1975:1).

[His own designs are least of all traditional in the sense that they read as conservative. In them new spatial play is so unobtrusively cloaked with old fashioned skill that the future is promptly entangled in historic continuity]

Roofs tend to be the most technologically exploited elements, particularly the double pitched typologies when they mould themselves to the walls below and shift and break to create volumetric focus and allow light to penetrate to the interior. The roof to Die Es (1965) (see Fig. 9.21) is crafted in a boat building manner as it rises and falls over the internal ridge beam that acts almost like a keel.



Figure 9.21. **Left:** Moulded rooflights to House Swanepoel in Cape. St. Francis (1980) (Author, 2005) . **Middle:** View through rooflight to bathroom of Die Es (1965) (Author, 2009). **Right:** Raised rooflight to House Wolfaardt (1965) (Author, 2009).

For House Beyers in Betty's Bay (1998) and Bertie Roberts in Camps Bay (1965) (see Fig. 9.22), contextual and spatial informants fostered a cantilevered support system.



Figure 9.22. **Left:** House Beyers (1998) showing concrete support system (Author, 2009). **Right:** Cantilevering supports to House Bertie-Roberts (1965) (Fagan archive - Job No. 644, undated).

9.6. Summary

Fagan's heterotrophic architecture has been formed through the mediation of two influences, namely an inherited vernacular tradition and a mediated Modern Movement education. Further mediations have been made between these influences and the exigencies of site and client requirements, with Fagan acting as the mediator in a process of conversion and assimilation. A series of formal tensions is created that allows the resultant architectural form to reverberate on an imaginary scale of resolution and opposition.

The dialectics of science and experience are mediated through the use of familiar architectural forms such as the chimney and sheltering roof, and haptic experience through the establishment of the architectural promenade. Formal and contextual dichotomies are mediated through classic and organic formal manipulations, the acceptance of commonalities between Cape and Mediterranean architectures, classic and romantic contextual relationships, and static and dynamic form making. The oppositions of inside and outside space are mediated through considerations of approach and entry, the vehicle and the pedestrian, front and back, thresholds and boundaries and introverted and extroverted spatial arrangements. Formal and functional oppositions are reconciled and contrasted by the tectonic means of frame and enclosure, space and volume, and focus and function. Lastly, the polarities of traditional technique and technological invention are mediated by the abilities of an individual with years of experience in inventing and making to create new stereotomic and tectonic relationships and to merge age-old techniques with modern materials and practices.

Chapter 10

(HETERO)TYPOLOGIES



Die Es (1967), House Simpson (1992), House Raynham (1967), House Neethling (1983), Paradys (2003) (all Author, 2008).

This section describes typological tendencies in Gabriël Fagan's architecture:

It builds on the descriptions of typology in the history outlined in Chapter Two.

Fagan's response to generative and productive typologies will be outlined.

10.1. Introduction

Indulging in the ineffable delight of designing buildings, in the creative process which cannot be subjected to quantitative analysis but lives in the imagining faculties, he produced a wealth of types, sizes and kinds of architectural spaces, all of which retain certain common characteristics. It can be said, and this should be considered his greatest asset, that there is no new departure, no abrupt turn to be traced in his work. The same characteristics that existed in his early work became even more prominent in the multiplicity of his later designs (Papadaki, 1950:26).

Fagan's search for form has been guided by two main architectural influences, namely the Cape vernacular and the mediated Modern Movement education he received at the University of Pretoria. This search has resulted in the assimilation, transformation and mediation of two distinct (although at times formally similar) architectural typologies, together with the architect's own inventions. The search for form has its parallels in the dialectic of precedent that Le Corbusier was faced with.

Like Adolf Loos, Le Corbusier found himself caught between two rival typologies: on the one hand the irregular, asymmetrical Arts and Crafts tradition of the yeoman house, with its L- or U-shaped plan; on the other, the regular, symmetrical prism, stemming from Palladio ... (Frampton, 2001:70).

The inherited Cape vernacular is formally signified by an object building. Its determinants are disputable but technology and an inherited tradition certainly played a role in forming the one-room-deep building typology (see Fig. 10.1). The Modern Movement typology was driven mainly by functional and technological requirements, resulting in a similar object type that in its International Style phase often negated context. However, the effects of solar orientation and function often resulted in an attenuated plan and a bi-nuclear planning typology (see Fig. 10.1).

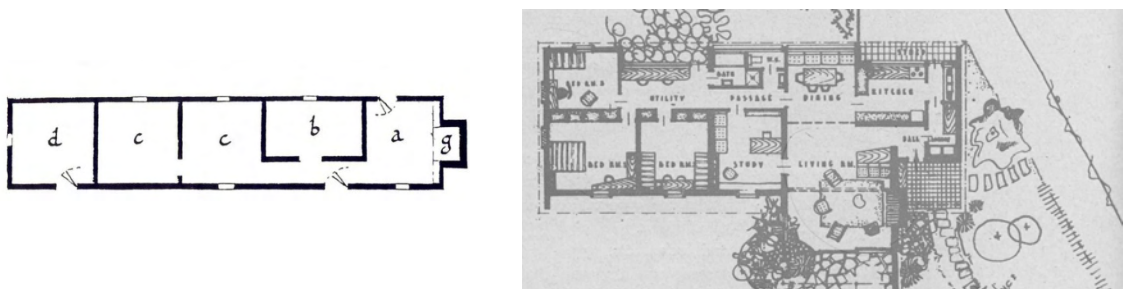


Figure 10.1. **Left:** One room deep extended rectangular cottage at Oudekraal Fontein in the Cape (Walton, 1995: 36). **Right:** Stauch and Wepener's Marriott residence in Johannesburg built in 1947 with north orientation to all living rooms and a bi-nuclear planning layout (Anon, 1952b).

The next section will outline how Fagan has responded to both generative and productive typologies, how he has assimilated and reworked his approaches and through his imaginative abilities has developed existing and formulated new formal and functional typologies. As Curtis

(1996:425) notes when referring to the work of Le Corbusier, each project has become a "testing ground for new ideas, as well as an extension of old ones".

10.2. Generative typologies (from the cellar to the sky)

10.2.1 The cave (the cellar)

Earth is the building bearer, nourishing with its fruits, tending water and rock, plant and animal (Heidegger, 1975:179).

The cave can be described as an embryonic space where man connects with Mother Nature in the closest possible way. Fagan's haptic sensibilities (possibly developed through his childhood exploits of trench digging in his garden and his appreciation of the stereotomic qualities of the Cape vernacular) coupled with his pragmatic bias have fused to create innovative ground/building connections in his houses (see Fig 10.2) – Keurbos (1951), Bertie-Roberts (1966), Raynham (1967), Paradys (2003), Die Es (1965), Auldearn (1992) and Fagan in McGregor (2005).



Figure 10.2. **Top left:** View from living room in House Keurbos (1951). The stone clad wall can be seen behind the bookcases (Author, 2008). **Top right:** House Bertie-Robert (1966). View from the garden showing stone retaining wall. (Fagan archive - job No. 644, undated). **Bottom left:** House Auldearn (1992). View from car court to entrance portico (Author, 2009). **Bottom right:** House Fagan in McGregor (2005). Concrete retaining walls anchor the house to the ground (Author, 2009).

These buildings are either entered from or sit within the ground²⁴⁰ in order to, at a functional level, facilitate service spaces to be located out of sight and, as Fagan notes (2008b), to partially hide 'unsightly' garage doors. Another major advantage is the reduction of building bulk and partially raising the building to gain better access to views or sunlight. This strategy was employed in House Swanepoel in Hermanus (1990), where a large accommodation schedule had to be fitted onto a very small site and a distant sea view could be exploited. The strategy is also indicative of a symbolic approach in which the visitor is physically or visually re-associated with the earth. In some instances the slope of the site has assisted in facilitating these strategies but in houses Raynham and Swanepoel in Hermanus the sites were relatively flat and had to be excavated to achieve the desired result. The original owners of House Raynham (1967) indicate (2009) that this strategy was used to raise the ground plane of the house to get better solar access. Fagan heightens the connection to nature in these semi-basement spaces by using rougher natural materials, as on the walls at Keurbos and on the floors at Die Es.

You will also notice that the house, like that in the parable, is built firmly on the rock, and that the sandstone cobbling now takes a more sophisticated appearance. Gwen laid every single stone, sometimes washing them down with her tears (Fagan, 1985:13).

The floor material changes from rough sandstone outside, to the smoother and smaller scaled cobbles of the same material (off the site) (Fagan, 2008e).

At Paradys (2003) (see Fig 10.3) the east-facing retaining wall is painted red, expressing a mythical connection with the earth. But Fagan also exploits the earth-sky connection in a Heideggerian way:

The sky is the sun's path, the course of the moon, the glitter of the stars, the year's seasons, the light and dusk of day, the gloom and glow of night, the clemency and inclemency of the weather, the drifting clouds and blue depth of the ether (Heidegger, 1975:179).

At Die Es the connection is expressed through a small skylight in the entrance hall (reminiscent of those in the bathrooms at Villa Savoye) (See Fig. 10.3), while in House Raynham (1967) there is an oblique connection to the mountain and sky through a tall window (See Fig. 10.3). In House Swanepoel in Hermanus (1990) the connection is made through a large courtyard rooflight (See Fig. 10.3).

— ²⁴⁰ See detailed descriptions of the ways in which the houses are connected to the earth in Chapter 10.4.3.



Figure 10.3. **Top left:** View from roof of House Paradys (2003) into courtyard at road edge (Author, 2009). **Top right:** House Die Es (1965). Rooflight over entrance hall (Author, 2008). **Bottom left:** House Raynham (1967). Window connection to Table Mountain range (Author, 2008). **Bottom right:** House Swanepoel in Hermanus (1990). Glazed courtyard roof providing connection to the sky (Author, 2009).

10.2.2 The hearth (and the symbolic mound)

In Semperian terms, the fireplace is the most important architectural element of the home as it has a long history of providing warmth for inhabitants and heat for food preparation. Traditionally it also formed the kitchen cum gathering space of the house. The climate of the Mediterranean region is such that fireplaces are not that essential for warmth in winter. Fireplaces in original Cape vernacular houses were used mainly for cooking and were tacked on the ends or sides of buildings. As Fagan (1985:10) remarks "The kitchen with its hearth was the accepted nursery and work place of the house".

Fireplaces were engaged with the walls and formed a unity with the building and, as Semper explains (1989:102), they formed part of the mound (or ground) on which the house was built. Le

Corbusier's 'vernacular' leanings also fostered similar approaches:

In the 1930s ... Le Corbusier's fireplaces acquire a more plastic quality, serving as a means to anchor the house more emphatically to the ground. Such fireplaces can be found in the house of Mme. de Mandrot, in the Errazuris project, and in the house at Mathes, not to mention his numerous unexecuted projects (Serenyi, 1965:18).

Fagan employs the fireplace both functionally and symbolically²⁴¹. Functionally, it continues to provide warmth but is seldom used to cook in. Symbolically it acts as focus to the home, either through its extended dimensions, as at Die Es (1965), or at the climax of the roof in living spaces, such as in House Neethling (1983) and House Swanepoel in Hermanus (1990).

In winter, you can join those sitting literally in the fireplace, the true center (sic) of the house, as also indicated by its name - *Die Es* or The Hearth (Fagan, 1985:14).

The genesis of the fireplace at Die Es has its roots not only in the vernacular but also in the largeness of form envisaged by Fagan. He has remarked (Fagan: 2008a) that he made a very small sketch of the house on the back of a cigarette box when returning from an overseas trip. When he tried to draw the house from the sketch the size of a conventional fireplace would not work. He then scaled the small sketch exactly which resulted in the size and extent of the chimney which formed a winter room. Sketches found in Fagan's archive suggest that the fireplace form was influenced by the old lime at Mowbray, Cape Town (see Fig. 10.4).

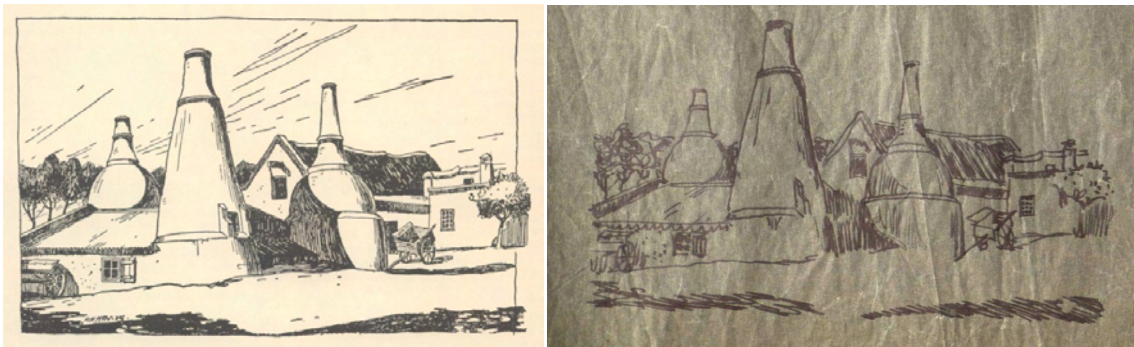


Figure 10.4. Left: Lime kilns at Mowbray, Cape Town (Pearse, 1933:23). Right: Fagan's sketch of the lime kilns presumably copied from Pearse (Fagan, archive, Die Es - Job No. 656, undated).

— ²⁴¹ See Chapter 10.4.4 for a more detailed explanation.



Figure 10.5. **Left:** Fireplace at die Es as viewed from road side garden (Author, 2008). **Middle:** Cantilevered braai to dining court of Die Es (1965) (Author, 2008). **Right:** Fireplace to Fagan's farmhouse at Kameeldrift (Author, 2008).

Fagan's fireplace extension to the house and smallholding that he bought from Basil South in Kameeldrif, Pretoria (see Fig. 10.5) is reminiscent of the first fireplace he designed and built for his parents in Keurbos (1951). The forms are similar but the treatment of the stone is very much in keeping with the Highveld aesthetic, which demonstrates Fagan's respect for context.

In most cases when a plastic design expression is sought (and the fireplace is externally located), the fireplace forms a unit that is part of the building. But an interesting mediation between vernacular uniformity and a Modern Movement tendency to separate elements is achieved in Die Es (1965), where the fireplace (when viewed externally and frontally) reads as part of the house, but on closer inspection is actually separated from the living space by a narrow window on the left and a glazed rooflight above (see Fig. 10.6). Similarly a braai fireplace cantilevers precariously from the sea facing courtyard wall (see Fig. 10.5).

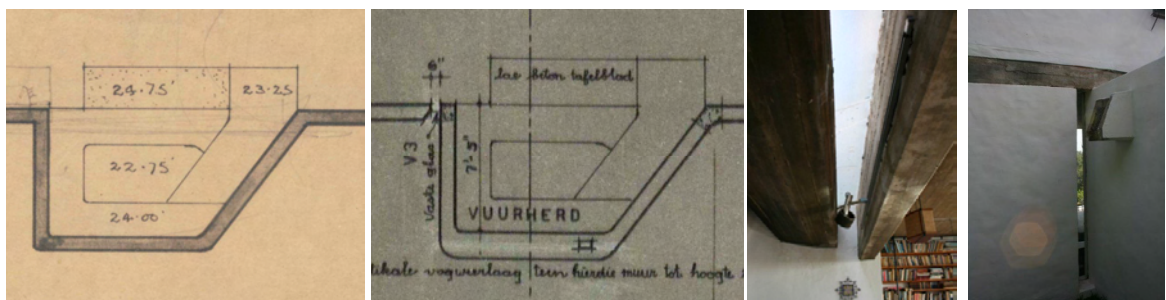


Figure 10.6. **From the left:** Fagan's sketch plan for Die Es (1965) (Fagan archive - Job no. 656 undated); Fagan's working drawing plan of Die Es showing addition of window to partially divorce the fireplace and from the main block (Fagan archive job no. 656, undated); View from hearth looking up at wired glass skylight separating fireplace and main building (Author, 2008) and view of slit window alongside fireplace (Author, 2009).

In contrast, in houses with less plastic expression and an internalised fireplace, the fireplace is separated into its constituent parts, with the Semperian mound still evident in the heavy hearth

base. It can be argued that Fagan, in a Modern Movement way (perhaps to achieve material and functional efficiency), expresses the varying functions of the fireplace by separating the hearth from the flue. In House Raynham (1967), the pinnacle of the roof rests on a concrete column against which a separate steel flue is supported (see Fig. 10.7). In House Beyers (1998), a stand-alone steel fireplace extends into a stainless steel flue which seemingly supports the roof pinnacle above as it rises through a balanced steel collar (see Fig. 10.7). These limited internalized configurations could possibly have been influenced by the houses of Fagan's lecturer Cole Bowen, who often used the fireplace as a room-dividing element. Similarities can also be seen in those designed by Marcel Breuer whose Modern Movement leanings downplayed the dominance (yet independence) of the hearth and flue.



Figure 10.7. Left: Fireplace flue as roof support to House Raynham (1967) (Photo courtesy of the Raynham's, 2009). **Right:** Fireplace at House Beyers (1998) (Author, 2009).

There is, however, no clear formal development in the fireplaces that Fagan has designed that suggests a move from stereotomic to tectonic resolution. It is the requirements of overall form and spatial definition that mainly dictate the outcome, as Fagan mediates the concerns of function, symbol, focus and response to tradition.

10.2.3 The covered courtyard (the partial sky)

Fagan's preference for a singular form in the landscape has fostered a mainly subtractive approach to the making of form. He uses the covered courtyard in a number of ways to foster a connection between earth and sky and to facilitate exterior contact within a controlled external form. Similar approaches can be seen in Le Corbusier's Villa Savoye where the box form is subtracted to form a series of partially covered and open courts.

In House Keurbos (1951) (See Fig. 10.8) the roofs of both the entrance hall and dining room are

glazed, allowing both light and sun to enter the spaces. Fagan (1985:6) notes that it also allows a view of the mountains beyond. The extensive planting and glazing to the southern roof pitch assist in mediating between inside and outside. Also, a bathroom court is formed in the northern wall of the house and here no overhead protection is provided save for the continuation of the roof eaves (See Fig. 10.8). The external wall frames a view towards the mountain while providing adequate privacy to the outside shower. On the eastern side of the house a smaller covered patio (which has now been glazed in on its northern edge) provides a protected open-air sitting area. Here the roof is opaque and connection with the exterior is frontally organized (See Fig. 10.8).



Figure 10.8. **Top left:** Glazed rooflight to dining area at House Raynham (1967) (Author, 2008). **Top right.** Bathroom to House Keurbos (1951) as it was originally designed and built (Author, 2008). **Bottom left:** Bathroom at House Keurbos altered by owner in 2010 and designed by Bert Pepler Architects (Photo courtesy of Leon Krige, 2010). **Bottom right:** Original covered terrace to House Keurbos (1951) now enclosed (Author, 2008).

In House Swanepoel in Hermanus (1990) the glazed courtyard roof connects the interior volume to the sky while providing much needed light and ventilation within the constricted plan (See Fig. 10.3). A bathroom courtyard, similar to that of Keurbos (1951), provides privacy, light, ventilation and a view of the stars at night (see Fig. 10.9). Security is provided by closely spaced reinforcing rods at

the same pitch as the roof. Small rooflights to internal bathrooms extend the cellar and sky theme (see Fig. 10.9).

In House Auldearn (1992) in Elgin, a small internal planted courtyard creates a focus at the end of the passageway to the bedrooms (see Fig. 10.9). The glazed roof allows light and sun to enter and provides a connection to the sky above.

The closest connection to Lewcock's description (2006:210) of the opening up of the roof in vernacular buildings to accommodate the fireplace is the relationship that Fagan establishes between the flues and roofs in Houses Beyers and Swanepoel in Hermanus (1998). In both these examples the roof sections around the flues are glazed to establish a connection to the sky while allowing the flues to read as free-standing.

Fagan creates an innovative mediation between the necessity for a singular form and the requirements of physical and climatic contact with the exterior.



Figure 10.9. **Left:** Main bathroom courtyard at House Swanepoel in Hermanus (1990) (Author, 2009). **Middle:** Bathroom rooflight at House Swanepoel in Hermanus (1990) (Author, 2009). **Right:** Rooflight over small internal garden to House Auldearn (1992) (Author, 2008).

10.2.4 The open courtyard (the sky)

Fagan remains true to the climatic considerations for courtyard design but frames the spaces in Modern Movement ways. The only courtyard that is completely surrounded by buildings is an unbuilt one designed for the hot, dry climate of the Tanqua Karoo area of the Cape (see Fig. 10.10). Here an almost Spanish style ensemble of buildings surrounds an internal pooled courtyard. In the Ceres area (which lies between the Tanqua Karoo and Cape Town), the courtyard of House Wolfaardt (1965) is surrounded by buildings on three sides²⁴².

– ²⁴² The owners have subsequently added a roof to part of the courtyard which takes away light from some of the spaces.



Figure 10.10. Top left: Fagan's unbuilt Oudebaaskraal with central courtyard (1984) (Fagan, 2005b:94). **Top right:** Courtyard from dining room at die Es with 'woven wall' and slit to sea view beyond (Author, 2008). **Bottom:** Plan and approach view of House Wolfaardt at Skaaprivierplaas (1965). The plan shows a partially defined courtyard (Fagan archive - Job No. 653, June 1965).

In the Mediterranean climate of Cape Town, Fagan favours a singular formal statement with large courtyards as extensions to or smaller courts as subtractions from the main form. The approach is a mediation of a generative (and introverted) open courtyard typology and a Modern Movement interpretation of continuous inside and outside space. In Die Es (1965), Fagan extends the dining space through a glazed wall to form an outside patio which also covers the partly subterranean garage (see Fig. 10.10 and 10.11).

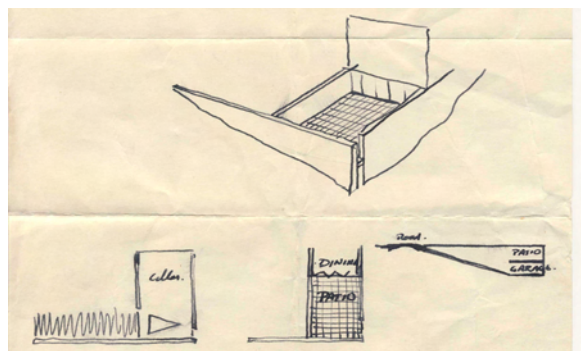


Figure 10.11. Left: Fagan's sketch of the dining courtyard prepared for the local authority (Fagan archive- Job No. 656, undated).

It is reminiscent of the relationship between living room and raised courtyard in the Villa Savoye. The courtyard space is entirely walled in, save for a slot in the western wall which allows a glimpse over the sea while strengthening the enclosing power of the eastern and northern walls. The courtyard is not only connected to the sky but also to the higher mountain views to the east. A similar mediation between inside and outside is achieved in the stepped glazing at House Blommaert (1982) in Stellenbosch (see Fig. 10.12), where a sun-filled courtyard extends onto a stepped passageway linking two independent blocks.



Figure 10.12. Left: Glazed walkway to bedrooms at House Blommaert (1982) (Author, 2009). Right: View from courtyard to glazed walkway at House Blommaert (1982) (Author, 2009).

The private subterranean courtyard at Paradys (2003) in Langebaan provides protection from the chilly winds (see Fig. 10.13). Its edges are formed by the surrounding earth and through glazed openings the space becomes an extension of the dining/living and kitchen spaces. In House Patterson (1966) Fagan uses a garden wall and three building blocks to define a courtyard hidden from the road and to foster the reading of a single form (see Fig. 10.13). Connections to the courtyard are limited, in a vernacular sense, to punctured openings, save for the original extensive open connection at the pottery studio end.



Figure 10.13. Left: Partly submerged courtyard at House Paradys (2003) (Author, 2009). Right: Courtyard to House Patterson (1966) (Author, 2008).

10.2.5 The defensive²⁴³ elements

10.2.5.1 The wall

Fagan's predilection for the stereotomic quality of the Cape vernacular wall results in his houses displaying a masonry architecture that acts both as structure and enclosure. Fagan asserts (2012a) this is necessary in a Mediterranean climate to provide sufficient thermal mass. The most developed approach occurs in houses such as Ida's Valley (1975), Lückhoff (1981) and Paradys (2003) (see Fig. 10.14), where a complete stereotomic and plastic expression is achieved. Here the barrel vaulted roof structures require support at both edges. Fagan cuts limited openings in these supporting walls, leaving a substantial beam and edge to define each space. In House Lückhoff the openings are arched to extend structural and formal integrity but in Paradys they are post and lintel configurations most likely to foster a continuity of space.



Figure 10.14. **Top and bottom left:** Exterior and interior views of barrel vaulted roofs at Houses at Idas Valley (1975) (Author, 2008). **Middle:** Exterior and interior views of barrel vaulted roofs at House Blommaert (1982). **Right:** Exterior and interior views of barrel vaulted roofs at House at House Paradys (2003) (Author, 2009).

Fagan follows a vernacular approach when forming smaller openings in external walls. Here he creates punctured elements with splayed reveals reminiscent of many of the old Cape Dutch homesteads, but he organizes the shape and location of these elements to suit the interior requirements. In House Keurbos (1951) a splayed window to the servant's room (see Fig. 10.15) provides privacy for the rest of the inhabitants while allowing a dominance of wall over opening on the western façade. An extended version can be seen in the recent proposal House van der Linde (2011). This approach contrasts with the vernacular where similar window sizes and shapes were used to suit all purposes. Where large openings are required for views or exterior contact, a Modern Movement approach is taken as walls are interrupted by large floor-to-ceiling openings. But the structural and formal continuity of the wall is retained where it acts as a ground floor support,

— ²⁴³ After Semper (Semper & Mallgrave, 1989:111).

such as at Die Es (1965), where large openings are formed with rounded edges (see Fig. 10.14). The planar nature of Modern Movement architecture is also echoed in the separated planes of Fagan's walls. Fagan uses this device to cleverly disguise service entrances that may fall within public view. The strategy also allows walls or other elements to read independently from one another to limit continuity or create hierarchies. House Raynham's (1967) front boundary walls are set back from one another to provide for a service gate to the yard (see Fig. 10.15), while they rise but do not meet the external wall of the house. The same approach to boundary wall and house is used in houses Lückhoff (1981), J.J. Fagan (2008) and both Swanepoel houses (1980 and 1990).



Figure 10.15. **Top left:** Splayed window to House Keurbos (1951) (Author, 2009). **Top middle:** Floor to ceiling windows with rounded corners to Die Es (1965) (Author, 2009). **Top right:** Layered boundary wall to House Raynham (1967) (Author, 2008). **Bottom:** Model of House van der Linde (2011) (Author, 2012).

Fagan uses the woven wall principle externally at houses Keurbos (1951), Langgeluk (1963) and Die Es (1965) (see Fig. 10.16). The back of the carport wall at Die Es is made with a front face of vertical bricks and a rear face of horizontally laid bricks. These are reminiscent of Eaton's and Cole Bowen's experiments with brickwork (see Fig. 10.16). As Semper (Semper & Mallgrave, 1989:130) remarks:

In many cases brick construction permits an ornamentation that also corresponds to wickerworks and the joint bonding of stone, for which there occur very beautiful and noteworthy examples in the early Italian style of architecture.

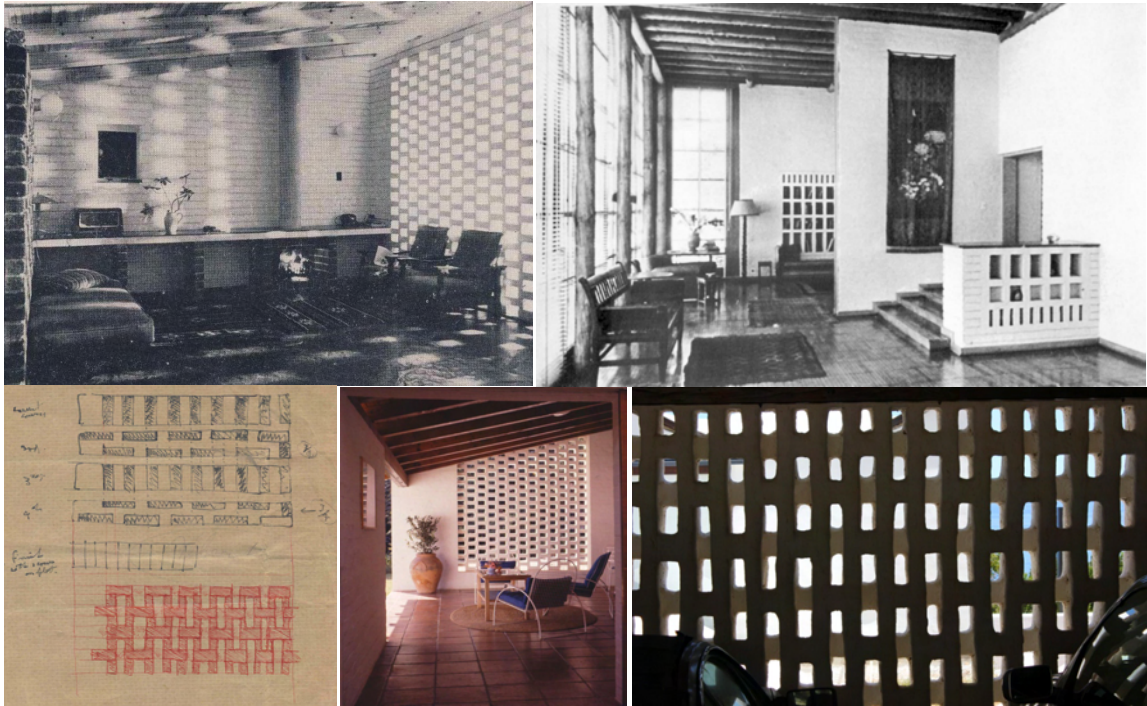


Figure 10.16. **Top left:** Honeycomb wall between living and dining rooms in House Collins (1951) by Cole Bowen (Cole Bowen, 1953:49). **Top right:** Brickwork wall niches in living room and study of Eaton's Anderson house (1949-1950) (Harrop-Allin, 1975:80). **Bottom left:** Fagan's sketches of screen wall to Die Es (1965) (Fagan archive job. no. 656, undated). **Bottom middle:** Keurbos original patio wall (Fagan, 2012b). **Bottom right:** Rear wall of carport to Die Es (Author, 2012).

Externally, Fagan uses the principles of a woven wall through the redefinition of the vernacular shutter. The timber screens which provide sun protection, privacy and security are almost always made with slots between the timber to allow light and ventilation. The fact that they slide provides a range of spatial opportunities not possible with a static masonry wall and echoes the planar nature of Modern Movement architecture. They also echo those designed by Eileen Gray for her Lou Péro house in Chapelle-Ste-Anne, built between 1954 and 1961 (see Fig. 7.43). This approach demonstrates how architects in completely different contexts interpreted vernacular elements in Modern Movement ways.

Fagan also creates a woven wall internally through the use of natural timber balustrades, bookcases or storage units and sometimes curtains to divide spaces. In houses Levin (1969) and Fagan in McGregor (2005) (see Fig. 10.17) the balusters are extended upwards to meet the roof and provide partial privacy between the double volume living space below and the bedrooms above. At Keurbos (1951) (see Fig. 10.17) the dining area is screened off from the entry way by horizontally slatted shelves and cupboards and the living area from a bedroom passage by way of bookcases. At House Swanepoel in Cape St. Francis (1980) and Paradys (2003) (see Fig. 10.17), cupboard spaces are hidden by curtains.



Figure 10.17. Top left: Balustrade as screen wall in House Fagan in McGregor (2005) (Author, 2009). Middle: Cupboard as screen between hall and dining area of House Keurbos (1951) (Author, 2008). Top right: Curtained cupboard to bedroom of House Paradys (2003) (Author, 2009).

10.2.5.2 The roof

Semper (Semper & Mallgrave, 1989:111) suggests that the roof developed as a prime element of shelter from its humble beginnings as a tent or cover over a hollow in the ground, gradually being raised to become an element on columns or walls. This tectonic tradition is expressed in the Cape vernacular mainly as a reed-covered and timber-framed pitched roof directly attached to the wall supports. As will be further explained in Chapter 10.4.7, Fagan has developed two distinct roof typologies, both influenced by local vernacular sources.

The stereotomic tradition of brick-vaulted roofs has been translated in the farmworker's houses in Idas Valley, Houses Lückhoff (1981), Paradys (2003) (see Fig. 10.14), the unbuilt Van Zyl in Swellendam (2007) and a proposal for House Visser (2011). Here roof, wall and floor all become one, attaining a complete plastic unity. But these interpretations are probably also, in part, related to the influence of Le Corbusier's interpretations of the Mediterranean vernacular in his 1935 weekend houses in Paris and *Petite Maison de Weekend* (Villa Fèlix, 1935) at La Celle-Saint-Cloud (see Fig. 10.18). Fagan (2008e) sees

the roof as a potentially important design element, be it in folded planes as in the Raynham house, or moulded plaster as in Paradys, in both cases relating to and explaining the plan. It is the plasticity and whitewall surfaces that relate to our traditional architecture and sit so well in our landscape, rather than the separated rigid forms dictated by the typical wings of a Cape Dutch homestead.

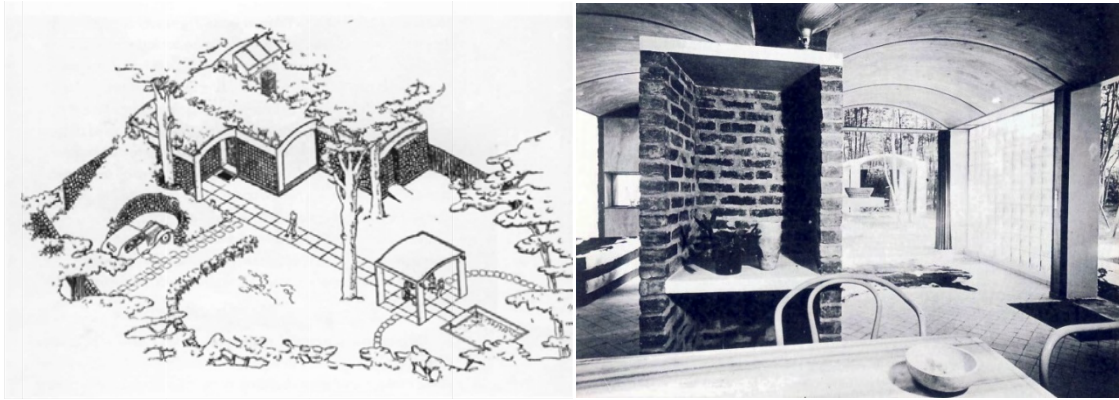


Figure 10.18. Left: Le Corbusier and Pierre Jeanneret: Maison de Weekend, La Celle-St-Cloud, 1935: isometric (Frampton, 2001:136). Right: Le Corbusier and Pierre Jeanneret: Maison de Weekend: interior (Frampton, 2001:136).

Fagan's interpretation of the Cape vernacular tectonic tradition of trussed or raftered roofs is guided by the singular nature of form that he wishes to represent. After Modern Movement experiments with flat roofs in South Africa, many architects like Douglas Cowin began to use roofs more inspired by Frank Lloyd Wright. Large overhangs protected houses from rain and sun and although this approach is appropriate for the Cape, Fagan resists the obvious solution and mainly uses pitched roofs with no eaves to achieve a holistic plastic solution. Only two houses have used extended eaves, namely House Auldearn (1992) and a new proposal, House van der Linde (2011) (see Fig. 10.19). Even the flat roof is avoided²⁴⁴, Fagan preferring the possibilities of volume, space and light inherent in pitched roof spaces.



— ²⁴⁴ Fagan has used a flat roof to connect independent elements in Die Es and on House Brink but both are punctured by roof lights.



Figure 10.19. Previous page left: Pitched roof to House Raynham (1967) ((Photo courtesy of the Raynhams, 2008). Previous page right: House Levin (1969) (Author, 2008). Left: House Auldearns' Frank Lloyd Wrightian roofs (Author, 2009). Right: Model of House van der Linde (2011) (Author, 2012).

Fagan often connects roof and floor (tectonic and stereotomic) elements through the use of a timber column which also helps to define the surrounding space. It was first used at Keurbos (1951) (see Figs 10.2 and 10.20) to define the starting point of the ramp, and was later used for the carport roof at Die Es (1965) (see Fig. 10.20). House Swanepoel in Cape St. Francis (1980) represents an extension of these ideas through a similar internal column but also external roof supports on the sea-facing edge (see Fig. 10.20).



Figure 10.20. Left: House Keurbos (1951): column support for main roof over dining and living areas (Author, 2008). Middle: Column support to carport at Die Es (1965) (Author, 2008). Right: Roof supports to House Swanepoel in Cape St. Francis (1980) (Author, 2005).

10.3. Productive typologies

10.3.1. Constants

10.3.2.1. Primary form

So strong is Fagan's conviction concerning the singular form (see Fig. 10.21) that he resists the design tendencies of his mentors Stauch and Cole Bowen to separate buildings into independent

elements such as garages and servants' quarters. As will be explained later, Fagan relies on a subtractive architectural approach to maintain the primacy of the singular form. This seems to have been a Cape tendency influenced by the inherited and mediated architectural tradition.

For those households with permanent maids, the maids' rooms and bathrooms are usually planned as part of the house with interleading doors for possible later conversion into a guest room or to enable the maid to baby sit without having to sit up. It is probably only this variation which distinguishes the Cape plan from its upcountry counterpart as ... the arrangement and relationships of the rooms, like many small houses throughout the world to one another, is similar (Munnik & Visser, 1965:38).

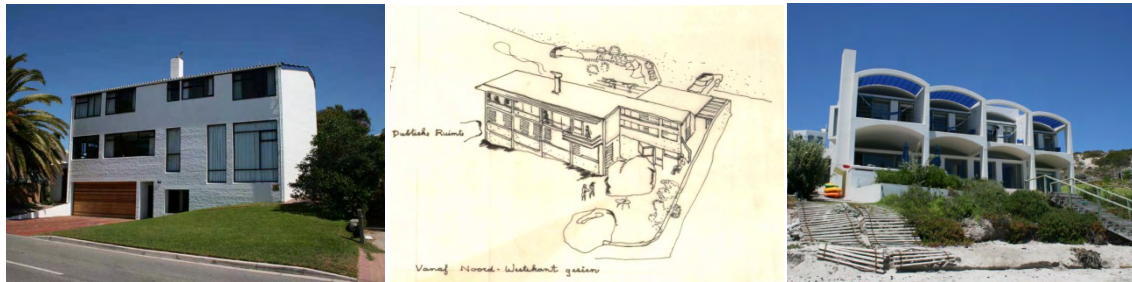


Figure 10.21. Some of Fagan's lesser know buildings which all illustrate the formal principle of a singular statement. **Left:** House Levin in Saldanha Bay (1969) (Author, 2008). **Middle:** Fagan's sketch for House Gardiner in Camps Bay (1972) (Fagan archive job no. 7203, 10/4/1972). **Right:** House Brink (2002), Langebaan (Author, 2008).

Fagan's reliance on primary form represents a congruency²⁴⁵ between that of the Cape vernacular tradition and the Modern Movement cubist influence. It is thus perhaps fortuitous that Le Corbusier's Mediterranean influences and his cubist creations were, in a formal sense, analogous with the Cape vernacular long-house. Fagan also relies on the sensory associations of primary form through his use of recognizable traditional elements such as the pitched roof and the chimney. But these elements are abstracted to elicit their purest and most functional intentions and located to serve more than their practical purpose.

10.3.2.2. Type

So the Cape farmhouse, in its forms and the organization of its internal spaces, lends expression to the significance of the family ideal, and the importance of a focus, a strong unifying element or space, was simply but beautifully stated by our forefathers (Rashmere, 1965:12).

Fagan's intimate knowledge of the Cape vernacular has allowed him to understand its development and refinement over time. His development of a set of 'lessons from the vernacular' (as outlined in Chapter 3) is analogous with Le Corbusier's search for form in the Mediterranean vernacular. But

— ²⁴⁵ In this instance there is less need for mediation as the forms of both influences bear many similarities, partly due to their, often, common Mediterranean inheritances.

just as the influence of engineering structures played a large role in the development of Le Corbusier's formal typologies, so has Fagan's understanding of the elements through yachting and flying modulated his approach to the making of form. Fagan's development of a fourth Cape vernacular typology represents a mediation between the concerns of formal significance, functional requirements and context. His continual refinement of this new typology has resulted in an attainment of type that surpasses the universalist tendencies of his hero.²⁴⁶

10.3.2.3. Proportion

Fagan notes that (Fagan: 1983b:8) in his early work he used proportional systems, based on Hambidge's book, to organize his design solutions. These bear many similarities to the inheritances of Le Corbusier's Modulor, but as Alford (1955:113) points out,

Le Corbusier has developed and applied a theory of architectural proportion which is precisely that which Jay Hambidge believed he had discovered in the design of the Parthenon and in Greek vases, and which he published about thirty years ago under the title of *Dynamic Symmetry*.

Fagan has derived his understanding of proportional systems from three sources. A direct influence would have been Hambidge's *Dynamic Symmetry* (see Fig. 10.22), as the system was taught at the University of Pretoria during Fagan's studies. Both Johan Jooste (2008a) and Carl Gerneke (2008) note that Karl Jooste used similar approaches in his work. Fagan would have been exposed to Le Corbusier's Modulor through teachings and his book purchases. But more direct and tangible were the Renaissance influences on Cape Dutch architecture as explained in Chapter 3.

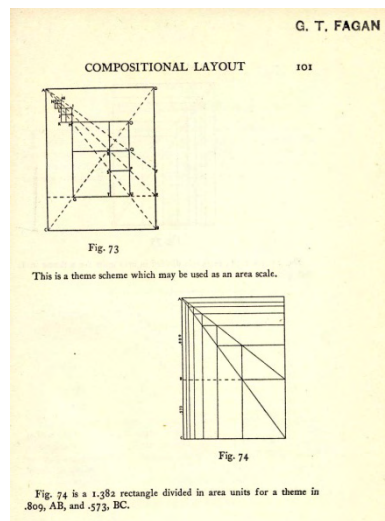


Figure 10.22. Left: Proportional layout system in Hambidge's book *Dynamic Symmetry* with Fagan's office stamp in top right corner (Hambidge, 1932:101).

— ²⁴⁶ For a detailed understanding of Fagan's development of type see the section on patterns in the following pages.

Fagan does, however, recognize that

... although lending a coherence and dignity to our traditional buildings, these ratios are very restrictive and generally lack the flexibility required by today's designs, and I have interested myself over the years in applying a system based on the Fibonacci (sic) series as evolved by Hambidge. Instead of calculating it arithmetically, however, I find that working visually on the drawing board with various diagonals, gives a better control over the result. This is a highly personal matter that I have found impossible to apply generally in the office, and can only use it in those (unfortunately now rather rare) cases where I myself draw the plans, sections, and elevations, plus all details which obviously require to be related on the same system. This is hardly the time to argue the merits of formal proportioning but that if it does nothing more than train the eye to become completely aware of its importance, it might already be justified (Fagan, 1985:8).

For Die Es (1965) proportional systems were used to organize all aspects of the house from the general plan to the details.

10.3.2. Conventions

10.3.3.1. Economy

Fagan has developed economical design approaches to both space and the use of materials. Along with Modern Movement attitudes towards functional appropriateness, these are based on an appreciation of the simple technologies of the Cape vernacular, where limited materials were at hand and inventive approaches had to be sought. These approaches were coupled with economic circumstances in South Africa after the Second World War when resources were in short supply. Peters (1998:187) remembers that Stauch was adept at building a lot with a little and this attitude must have influenced Fagan through Stauch's teachings at the University of Pretoria. Fagan's knowledge of boat building and the compromises that need to be reached between weight and durability versus speed has played a significant role in his material choices. He often employs the flitch beam where larger spans would make the size of timber uneconomical and bulky, the latest example occurring at House Mitchell (2005) (see Fig. 10.23). Here he combines timber with plate steel to form rafters. He also employs cross beams to limit the size of rafters. The positions of these cross beams also help to define and demarcate spaces, such as at the junction of living and dining rooms in Keurbos (1951) (see Fig. 10.23), the loft spaces in House Swanepoel in Cape St. Francis (1980) and at the carport in Die Es (1965). Fagan also limits building depth as in vernacular buildings, where limited timber lengths determined spans.



Figure 10.23. **Left:** House Mitchell (2005): Flitch beams in living area (Author, 2009). **Middle:** House Keurbos (1951): beams used to reduce span and define spaces (Photo courtesy of Leon Krige Architect, 2010). **Right:** Column supports for thatch roof at House Swanepoel in Cape St. Francis (1980) (Fagan archive - Job No. 8011, slide collection IC, undated).

The limited internal space in a yacht has also influenced Fagan's designs. A recurring theme is the nautical bathroom²⁴⁷, a tight (and sometimes unforgiving) internal space with roof light over, which is entered by stepping over a raised cill. The entire space is designed as a shower complete with duck boarding. The tightest configuration can be seen in Paradys (2003) (see Fig. 10.24). Fagan recalls (Fagan: 2009b) that he stood on a piece of paper and described the tightest arc that he thought would be suitable. The earliest nautical example is in Die Es where the Plexiglas skylight is reminiscent of that of a yacht (see Fig. 10.24). A raised cill and curved corners extend the approach.



Figure 10.24. **Left:** Main bathroom to House Die Es with Plexiglas skylight over (1965)(Author, 2009). **Middle:** Bathroom entrance to House Lückhoff (1981) (Author, 2009). **Right:** Bathroom off bedrooms to House Paradys (2003) (Author, 2009).

Fagan also reuses materials, such as for the front door of Die Es (1965) which was salvaged from old copper boilers (Fagan, 2012) (see Fig. 10.25) and Japanese fishing net floats at Die Es (see Fig.

– ²⁴⁷ These configurations seem to be used most often when the houses are in close proximity to the sea.

10.25), which was built by himself and his family, he achieved huge monetary savings. The limited brick palette at Paradys (2003) and the 1981 Lückhoff house fosters economical construction. The front door to House Paradys (2003) was "bought at a rummage sale in Tulbagh after the 1969 quake, but its precise provenance is unknown, except that it was apparently picked up in the veld on the farm Middelpoos" (Fagan 2012a) (see Fig. 10.25).



Figure 10.25. Left: Japanese fishing net floats as light fixture in second bedroom of Die Es (1965). Middle: Front door to Die Es (1965) made from copper boilers (Author, 2009). Right: Front door to House Paradys (2003) (Author, 2009).

10.3.3.2. Efficiency

The convention of efficiency is closely related to that of economy. In Modern Movement terms there had to be a direct relationship between the functional requirements of space and what was used in architectural terms to give effect to that space. Le Corbusier believed that effective and functional design would naturally give rise to beauty. Fagan (1991:15) alternates in his approach to this attitude, firstly agreeing:

The primary responsibility of the architect is not to satisfy his sculptural instincts. The primary responsibility of the architect is to design an effective living environment – that is, a building that works, that uses materials well, that uses energy effectively,

but then disagreeing:

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's approach to efficiency is technological, spatial and functional. Materials are always used in their purest form. In situ reinforced concrete is left as is, sans plaster or paint, even when it could possibly compromise the integrity of the overall form such as at Die Es (1965) (see Fig. 10.26), where the first slab is exposed on all edges. Brickwork is bagged and painted (see Fig. 10.26), an

aesthetic tendency Fagan must have inherited from mentors such as Stauch and Eaton who employed similar approaches, but also from the rough textured nature of the Cape vernacular. Roof timbers are varnished (see Fig. 10.26) but doors are often painted to give symbolic expression to their interior and exterior nature (see Fig. 10.26).



Figure 10.26. **Top Left:** Exposed first floor concrete floor slab to House Die Es (1965) (Author, 2008). **Top right:** Bagged and painted brickwork to House Blommaert (1982) (Author, 2009). **Bottom left:** Differing internal and external colours to doors at House Swanepoel in Cape St. Francis (1980) (Fagan archive - Job. No. 8011, slide collection IC, undated). **Bottom right:** Bagged and painted brickwork and timber beams and ceilings to House Blommaert (1982) (Author, 2009).

In spatial and functional terms service zones are tightly organized and combined so that more space is available for living and sleeping. Volumes are exploited to provide mezzanines for sleeping or storage²⁴⁸, while passages become study and play spaces. Fagan mostly adopts a centrally entered plan which limits circulation routes (see Fig. 10.27).

²⁴⁸ This is very much in line with Stauch's efficient use of space and Nation's comment (2001) on Stauch that no space should ever be wasted. See Hakahana for a similar mezzanine configuration.

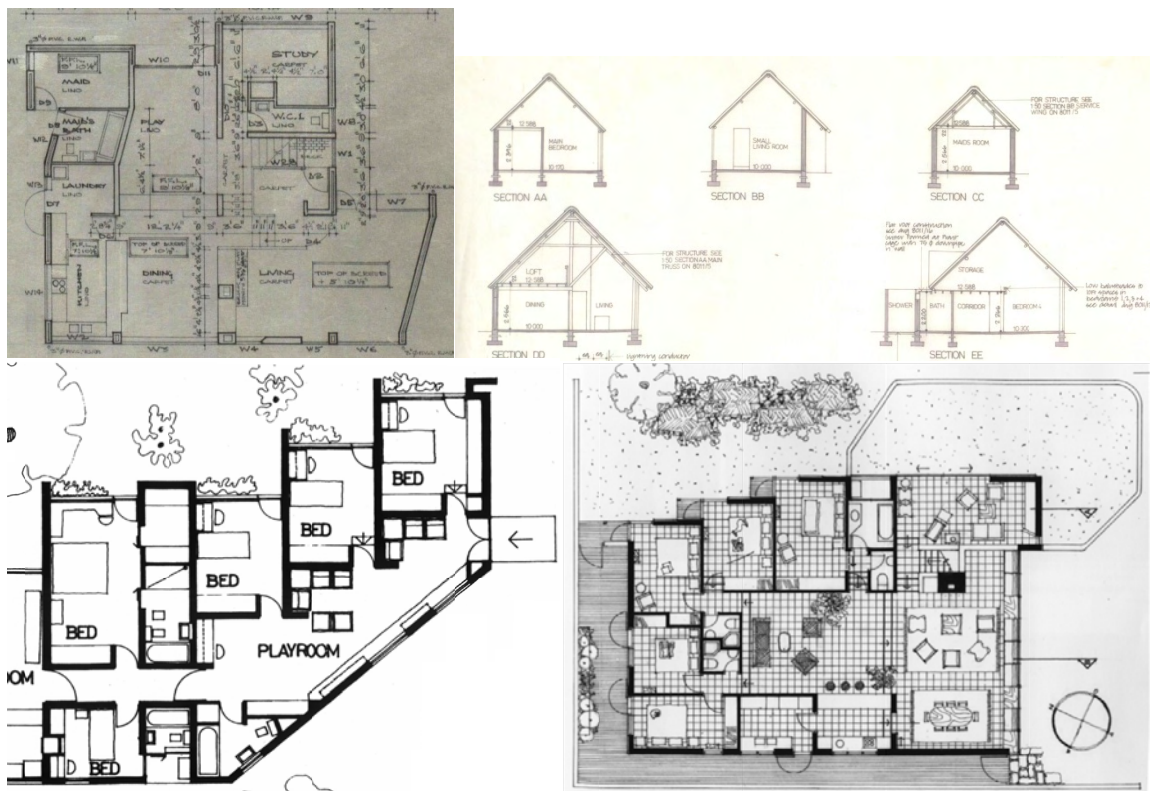


Figure 10.27. Top left: Fagan's sketch plan for House Levin (1969) with central circulation core (Fagan archive - Job No. 6910, 24/07/1969). Top right: Various sections for House Swanepoel in Cape St. Francis (1980) showing loft and storage spaces (Fagan archive - Job No. 8011, 18/11/1980). Bottom left: Part plan of House Raynham showing extension of passageway into playroom (Fagan, 2005a:52). Bottom right: Plan of House Swanepoel in Hermanus showing tight service and generous living spaces (1990) (Fagan, 2005a:103).

10.3.3.3. Health

The initial Modern Movement concerns for the health and well-being of inhabitants led to the development of many of Le Corbusier's architectural principles. The roof garden and courtyards or balconies together with volumetric exploration and an increased building height provided light, sun and adequate ventilation to occupants. The necessity for solar orientation later resulted in the attenuated plans of architects such as Marcel Breuer. Developments by local architects such as Norman Eaton and Hellmut Stauch influenced other architects and lecturers such as Cole Bowen and South.

Fagan has adopted the attenuated plan but it is not only employed for adequate solar penetration. Views play an even bigger role in the development of the linear form, such as at houses Raynham (1967) and Swanepoel in Cape St. Francis (1980) where mountain and sea views dominate. Fagan uses light not only to provide comfortable conditions but also to accentuate the architectural promenade. The seemingly incongruous internal position of bathrooms in many of Fagan's designs mitigates against good light and ventilation. Fagan is perhaps uncompromising in these situations, preferring to maintain a tightness of form which gives preference to light and ventilation for

bedroom and living spaces²⁴⁹. But perhaps the Corbusian influence remains prominent as can be seen in the internal bathrooms designed for Maison Loucheur (1929) (see Fig. 10.28). Fagan does, however, manipulate the roof in innovative ways to allow solar gain and views where necessary. House Levin (1969) incorporates rooflights and breaks centrally to allow light to penetrate the circulation volume, while a simple angled roof light provides adequate light to the kitchen in House Wolfaardt (1965) (see Fig. 10.28). House Swanepoel in Hermanus (1990) has three different roof light configurations – over the courtyard, around the chimney (see Fig. 10.28) and a series of bathroom domes.

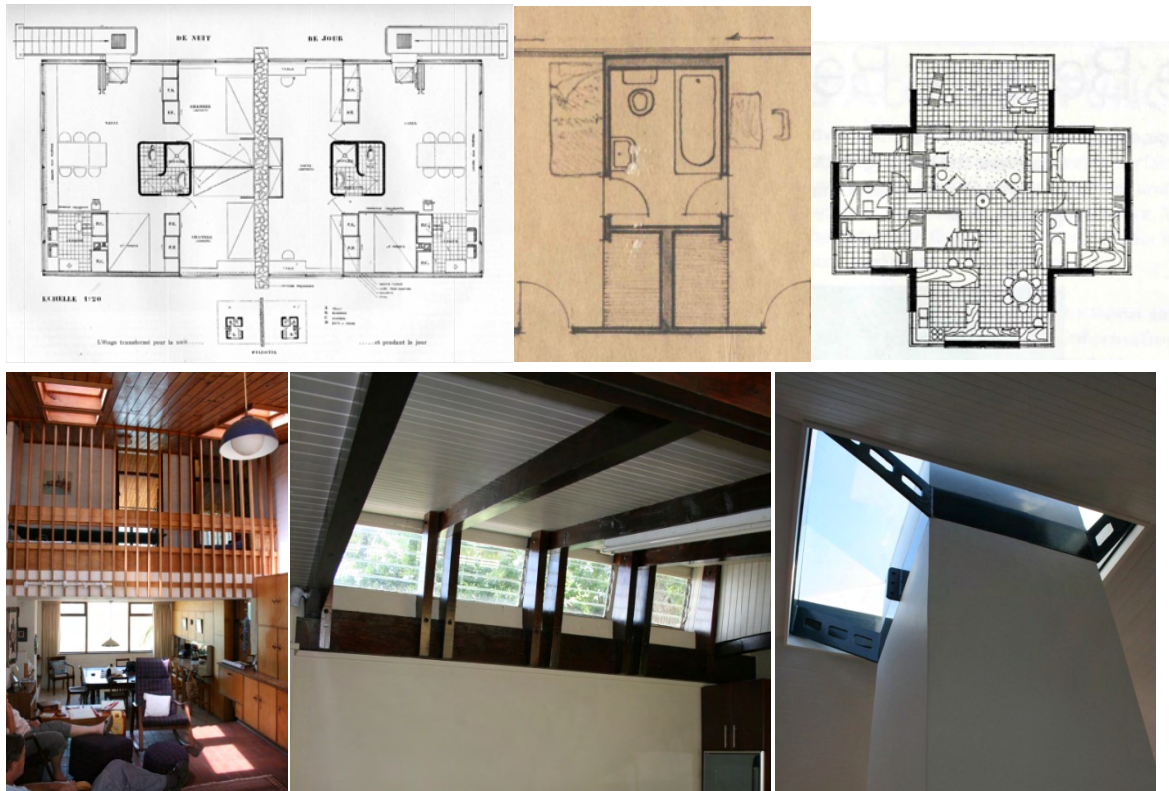


Figure 10.28. Top left: Plan of Maison Loucheur by Le Corbusier (1929). Note the tightly planned bathrooms (Le Corbusier & Jeanneret, 1943: 198). **Top middle:** Plan of main bathroom at Die Es (1965). **Top right:** Plan of House Beyers (1998). Note the tightly planned bathrooms (Fagan archive - Job No. 9813, undated). **Bottom left:** View of rooflights to upper floor bedrooms at House Levin (1969) (Author, 2009). **Bottom middle:** View of angled rooflight to House Wolfaardt (1965) (Author, 2009). **Bottom right:** View of rooflight around chimney to House Swanepoel in Hermanus (1990) (Author, 2009).

Fagan adopts an innovative approach to ventilation which is reliant on the Modern Movement principles of the separate requirements of view, solar gain and ventilation for windows. At Keurbos the glass louvres, sliding windows, and frameless glazing panels (see Fig. 10.29) between exposed rafters provide ventilation. Paradys (2003) has a frameless pivoted glass window above the mezzanine level and portholes in the bathrooms (see Fig. 10.28).

– ²⁴⁹ He is also uncompromising in his definition of external form, so much so that the possibility of windows in external walls to bathrooms in House Beyers (1998) were not explored or instituted. This caused much consternation to the clients (Beyers, 2009).



Figure 10.29. **Left:** Sliding glazed panels between rafters at House Keurbos (1951) (Author, 2008). **Middle:** Window to mezzanine over passage at House Paradys (2003) (Author, 2009). **Right:** Porthole at House Paradys (2003) sea facing bathrooms (Fagan, 2012b).

10.4. New and renewed typologies

Cape Dutch architecture - - - The pitching of the roofs, the gabling of the ends and centres, the use of the same types of door and window similarly divided and shuttered, the whitewashed plaster, the wooden ceilings and red-tiled floors – these and many other details they had in common, formed the simple theme upon which a thousand gently dissimilar but beautiful variations were played. It was all so simple, so practical, so unvaryingly beautiful, so 'right' (Harrop-Allin, 1969:26-28).

Fagan has built on and extended these traditions to form his own typological patterns or formal themes in his domestic architecture. These can be attributed to the reworking of an idea in order to perfect it, reusing an approach that has been designed before and has worked well, nostalgic leanings, or the creation of a recognizable architecture almost at the limits of a style – not aesthetic, but formal or functional. These are certainly part of the new language that is created by Fagan but they do not dominate or dictate the final architectural response.

10.4.1. The linear (attenuated) plan (see Fig. 10.30).

This device is mainly derived from the mediated Modern Movement principles of climatic orientation and function but also has its origins in the long-house plan.

Keurbos (1951) is clearly organized around the principle of served and servant spaces so that the living and bedroom spaces face the view and north. House Bertie-Roberts (1966) follows the same pattern in a much more rigid linear form. Fagan's own house, Die Es (1965), is less rigidly organized at first floor level but the views and slope form the linear plan. Houses Raynham (1967), Swanepoel in Cape St Francis (1990) and Neethling (1983) are all organized in a linear manner but more amorously as the houses try to straddle the concerns of view, site orientation and northern

sun. The attenuated plan of House Swanepoel in Cape St. Francis (1980) is also the result of the limitations of a steeply pitched thatch roof which would become too high if the plan were too wide (Fagan, 2008c). Paradys (2003) responds to the slope of the ground and the sea views, allowing all bed and living rooms to face outwards and have exterior access.

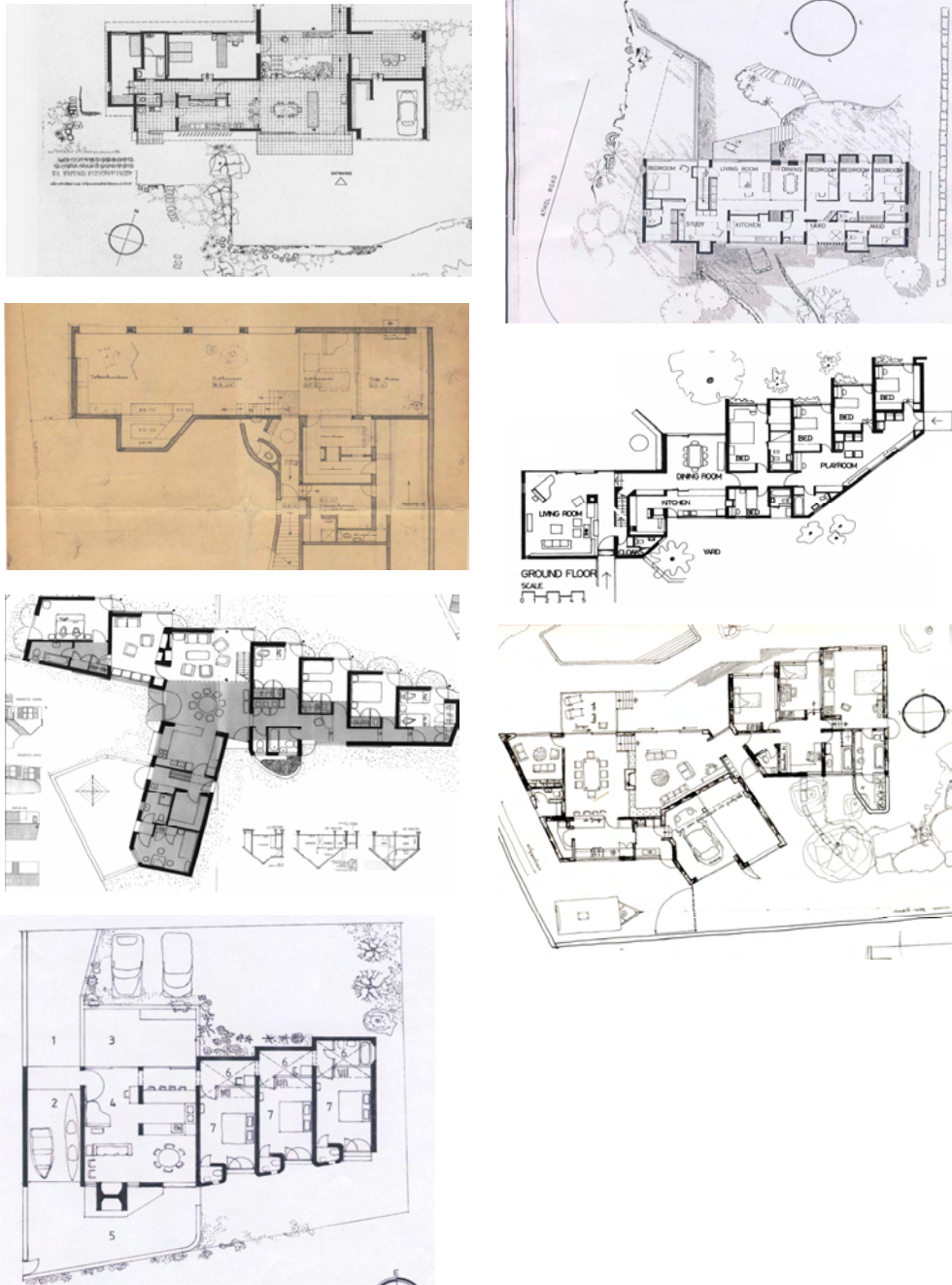


Figure 10.30. Top left: House Keurbos (1951) (Wale, c1964:50). **Top right:** House Bertie-Roberts (1965) (Anon, 1968:12). **Second from top left:** House Die Es (1965) (Fagan archive - Job No. 656, undated). **Second from top right:** House Raynham (1967) (Fagan, 2005a:52). **Second from bottom left:** House Swanepoel in Cape St. Francis (1980) (Fagan, 2005a:73). **Second from bottom right:** House Neethling (1983) (Fagan, 2005a:83). **Bottom:** House Paradys (2003) (Fagan, 2005a:125).

10.4.2. The guided entrance (see Fig. 10.32).

The approach to many vernacular Cape buildings was axial in nature. In Fagan's houses there is a similar but more directed approach as the path 'grows' out of the ground, increasing in definition as the front door is approached. In House Bertie-Roberts (1966) (see Fig. 10.31) the entrance route is is guided from below by the sides of garden retaining walls that lead under a cantilevered edge of the house above. Here ground and house meet in an open riser staircase slung along the side of a concrete retaining wall. At Die Es (1965) (see Fig. 10.31) a low white wall guides the visitor from the street, while a simple steel handrail on the carport edge extends continuously downwards to the front door.



Figure 10.31. Left: House Bertie-Roberts entrance stair from carport (Fagan archive - Job No. 644, undated). Right: Entrance wall, carport column and steel rod handrail leading to front door (Author, 2009).

At House Raynham (1967) the approach starts with a path perpendicular to the street. As the house is angled in respect of the street the path meets a ramp extended from the house at a point of change in direction. The ramp is raised and edged by a low wall, cutting off the view to the garage below and guiding movement towards the recessed front door and top light above. The entrance to House Swanepoel in Cape St. Francis (1980) is defined by an extended wing of the main building and a curved bathroom courtyard wall. House Neethling (1983) is similar in that the edge of the projecting garage and garden wall define the entry route, while House Swanepoel in Hermanus relies on a low garden wall and slightly downward sloping ramp. At Paradys (2003) and Fagan in McGregor (2005) retaining walls are used to form a descending route. Entry is partially hidden by the perpendicular approach to a garage door and only on reaching the garage is the front door revealed.

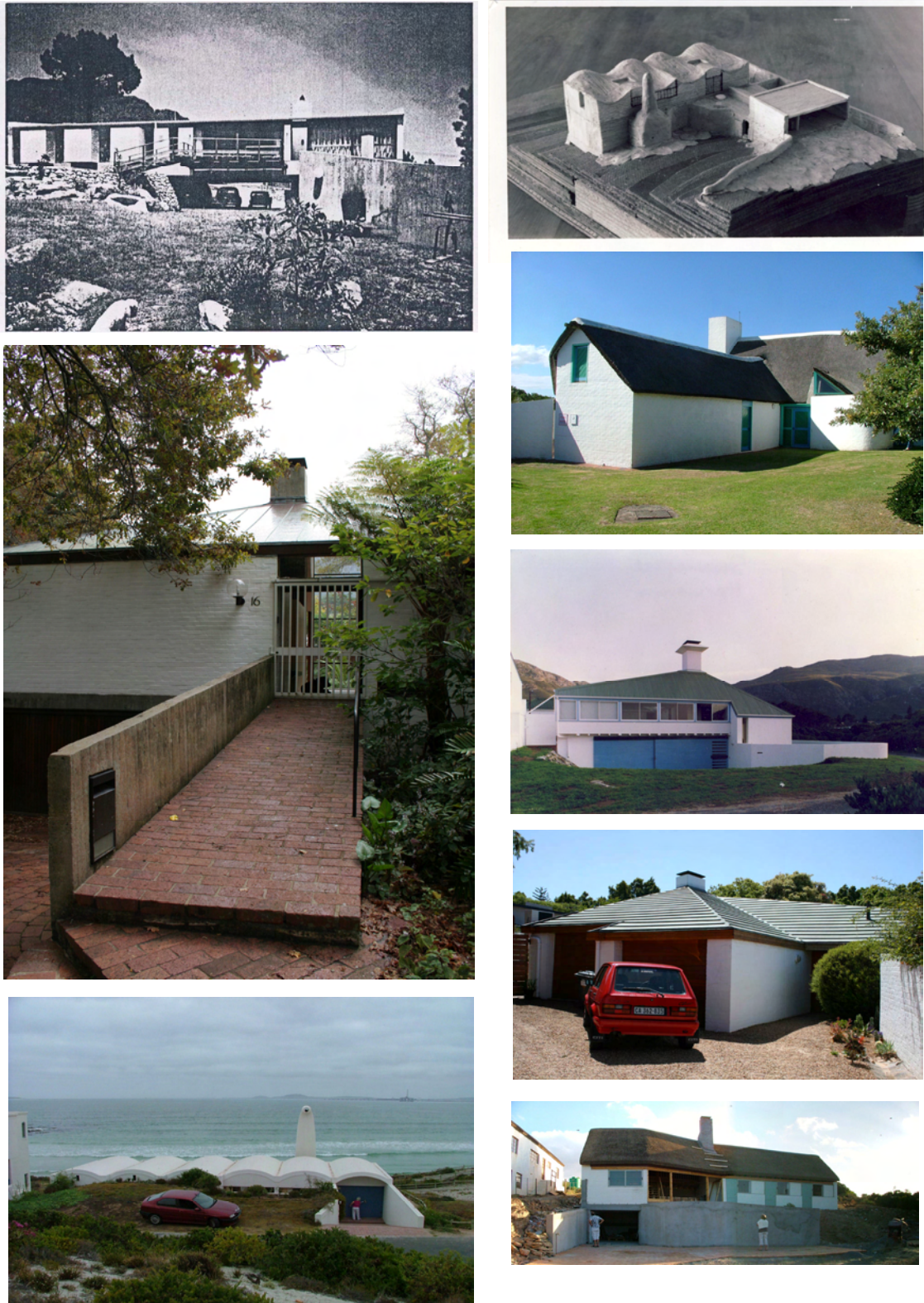


Figure 10.32. Top left: House Bertie-Roberts(1965) (Anon, 1968:11). Top right: Model of Die Es (1965) (Fagan archive - Job. No. 656, undated). Second from top left: House Raynham (1967) (Author, 2008). Second from top right: House Swanepoel Cape St. Francis (1980) (Author, 2005). Third from top right: House Swanepoel in Hermanus (1990) (Author, 2008). Second from bottom right: House Neethling (1983) (Author, 2009) Bottom left: House Paradys (2003) (Author, 2009). Bottom right: House Fagan in McGregor (2005) (Author, 2009).

10.4.3. Building/earth relationships – typological and topographical (see Fig. 10.33).

The Cape vernacular tradition is formally composed of white rectangular forms which, through their shape and colour, provide a strong counterpoint to the linear landscape. Many orthodox modernist forms share this formal similarity while also responding to the landscape in a classical manner. Fagan's houses draw on these similarities but provide tension through a more romantic and physical connection with their surroundings. The junction between earth and house is, in most cases, where entry occurs and a conclusion could be that Fagan wishes to re-associate the visitor with his earthly beginnings before entering the private realm. House Bertie-Roberts (1966) literally hovers between earth and sky as the box form, carried on two concrete u-shaped channels, cantilevers over stone and concrete retaining walls. But the building is grounded by its walled connection to the earth.





Figure 10.33. Previous page top left: House Bertie-Roberts (1965) (Fagan, 2005a:19). **Previous page top right:** House Bertie-Roberts (1965) (Fagan archive - Job No. 644, undated). **Previous page bottom left:** House Die Es (1965) low garden wall (Author, 2008). **Previous page bottom middle:** House Raynham (1967) sunken garage (Author, 2008). **Previous page bottom right:** House Swanepoel in Hermanus (1990) (Author, 2008). **Top left :** House Paradys (2003) (Author, 2009). **Top right:** House Fagan in McGregor (2005) (Author, 2009).

The house is both dug in and raised up at the same time and the crossing point forms a logical position for the entrance. Die Es (1965) steps down with the site and seemingly forms itself out of the plastic white walls that grow from the garden. In House Raynham (1967) the garage is submerged out of sight, anchoring the building in the ground while the hovering ramp provides a sense of disconnection from the earth. House Swanepoel in Hermanus (1990) anchors itself to the earth through the partially submerged garage and stone retaining wall to the north. A low garden wall to the south completes the framed “base” while the rest of the house perches above in unison. Houses Paradys (2003) and Fagan in McGregor (2005) are connected to the earth in similar ways as their garage and front door entry points merge in the earth. Paradys is less submerged but in both cases a strong link to the earth is formed at these points.

10.4.4. The chimney as focus (see Fig. 10.34 -10.36)

The chimney is an important vernacular element both in terms of its formal importance as a recognizable feature and because of its physical and spiritual function as the hearth of the home. Fagan has recognized the nostalgic associations and in Die Es (1965) exaggerated this feature to create a fireplace room and a focus point externally. House Patterson (1966) has a similar fireplace room but the chimney is not as evident in the formal composition. Here the counterpoint to the monopitch roof bears similarities with Keurbos (1965). The chimneys to houses Paradys (2003) and Brink (2002) provide a counterpoint to the linearity of the houses. There is also a subtle distinction in the relationship of chimney to wall. In houses Keurbos (1951), Patterson (1966), Auldearn (1992) and Brink (2002) the chimney engages with the adjoining wall surface, while at Die

Es (1965), Paradys (2003) and House Lückhoff (1981) the chimneys maintain differing degrees of independence from the main forms.



Figure 10.34. Top from left to right: House Die Es (1965) (Author, 2009), House Patterson (1966) (Author, 2008). House Keurbos (1951) (Author, 2009), House Paradys (2003) (Author, 2009). Bottom from left to right: House Brink (2002) (Author, 2009), House Auldearn (2002) (Author, 2009). House Lückhoff (1981) (Author, 2009).

But in houses like Neethling (1983) and Swanepoel in Hermanus (1990) the chimney takes on a new role as structural support for the roof. In these houses the chimney becomes both the physical and functional hearth of the home and provides both an internal and external focus point. The plasticity of the column chimney is innovatively explored in House Neethling, where the chimney twists to accept the tapering roof beams. House Beyers (1998) is also centered at the roof pinnacle but does not act as a structural member. Here as in House Swanepoel in Hermanus (1990) light filters into the living spaces through glazed connections between chimney and roof.



Figure 10.35. Left: House Neethling (1983) (Author, 2009). Middle: House Swanepoel in Hermanus (1990) (Author, 2009). Right: House Beyers (1998) (Author, 2009).

In House Bertie-Roberts (1966) the chimney takes on many roles. Although the cantilevered floor structure is supported on the grounded wall, the position of the chimney visually assists in a supporting role. Apart from its functional role as hearth, it defines the entry area and serves as a 'lookout' tower, a requirement of the owner who was a fisherman. Access to the outside of the chimney was gained from the study. The chimney also acts as counterpoint to the linear box form and as focal point to the building.

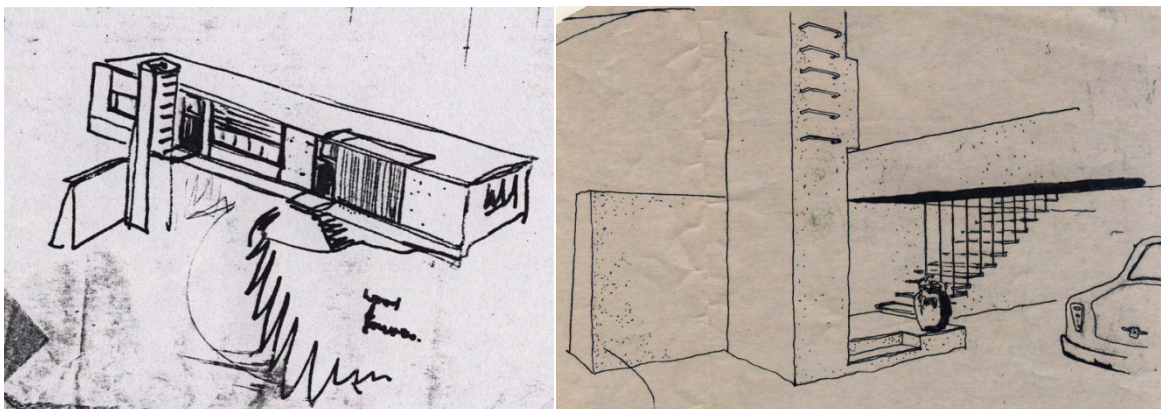


Figure 10.36. Fagan's sketches for House Bertie-Roberts (1965) showing supporting role of chimney on left and access on right (Fagan archive - Job No. 644, undated).

10.4.5. Bedroom privacy and external contact (see Fig. 10.37)

Fagan once remarked (1996b) that bedrooms should never suffer from the 'Holiday Inn syndrome'. When questioned he explained that once you left your bedroom and stepped on the balcony you were there for all the world, including your neighbour, to see. In House Bertie-Roberts (1966) the first evidence of the creation of private spaces outside bedrooms can be seen. Fagan extends the cupboard areas outwards to create private recesses. In House Raynham (1967) the stepped plan

was used for the first time and Fagan (2008c) remarks that here he had space to be able to step the plan and create a private space for each bedroom, which made an enormous difference to the qualities of the interior space. In houses Swanepoel in Cape St. Francis (1980) and Hermanus (1990) the stepped plan encompasses a corner window. In houses Raynham (1967), Blommaert (1982) and Neethling (1983) the bedrooms have a more direct relationship with the garden, a similar approach to that of Paradys (2003). Here, for the first time, the bathrooms are used (together with the stepped plan) to create privacy for each room.

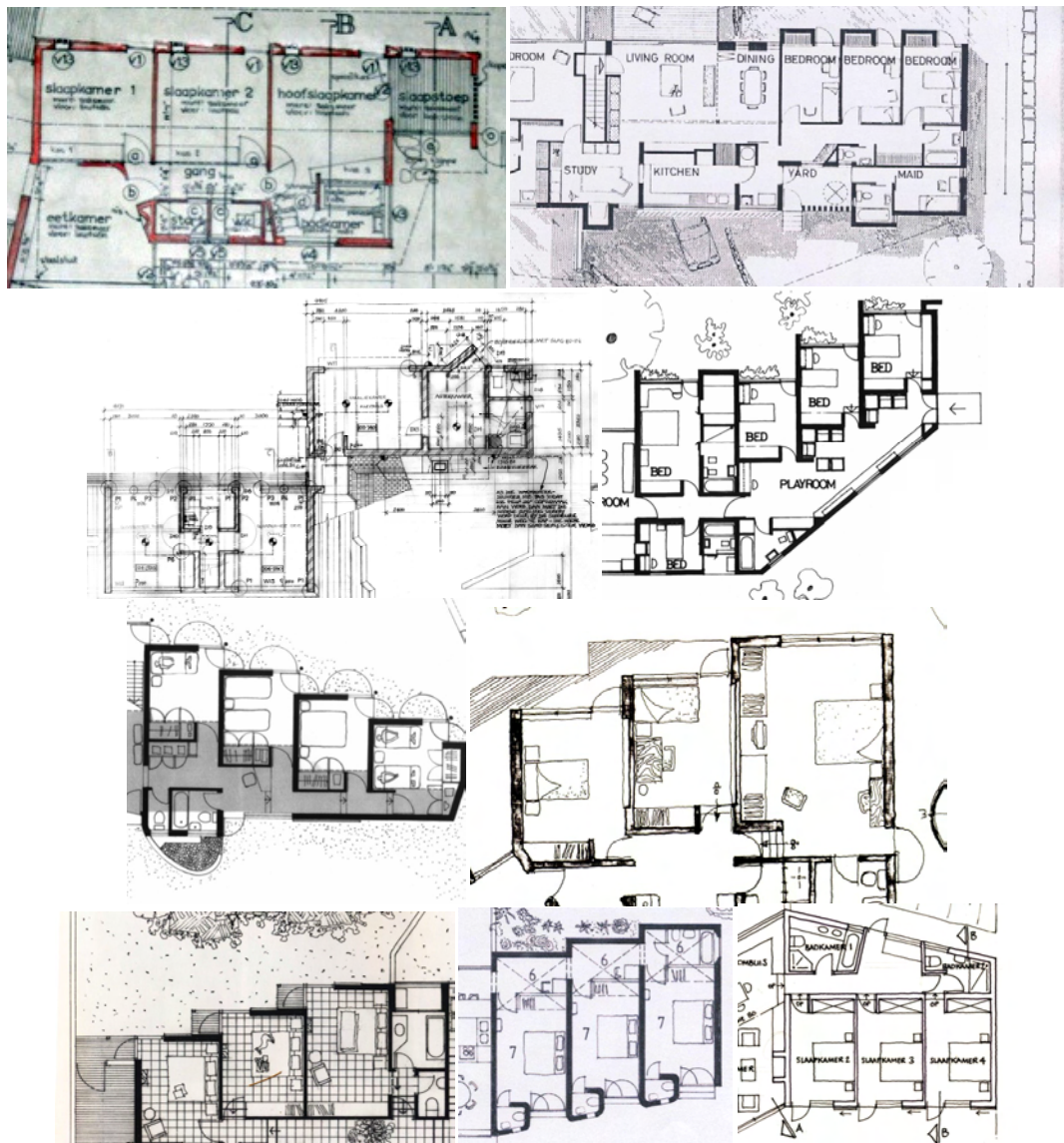
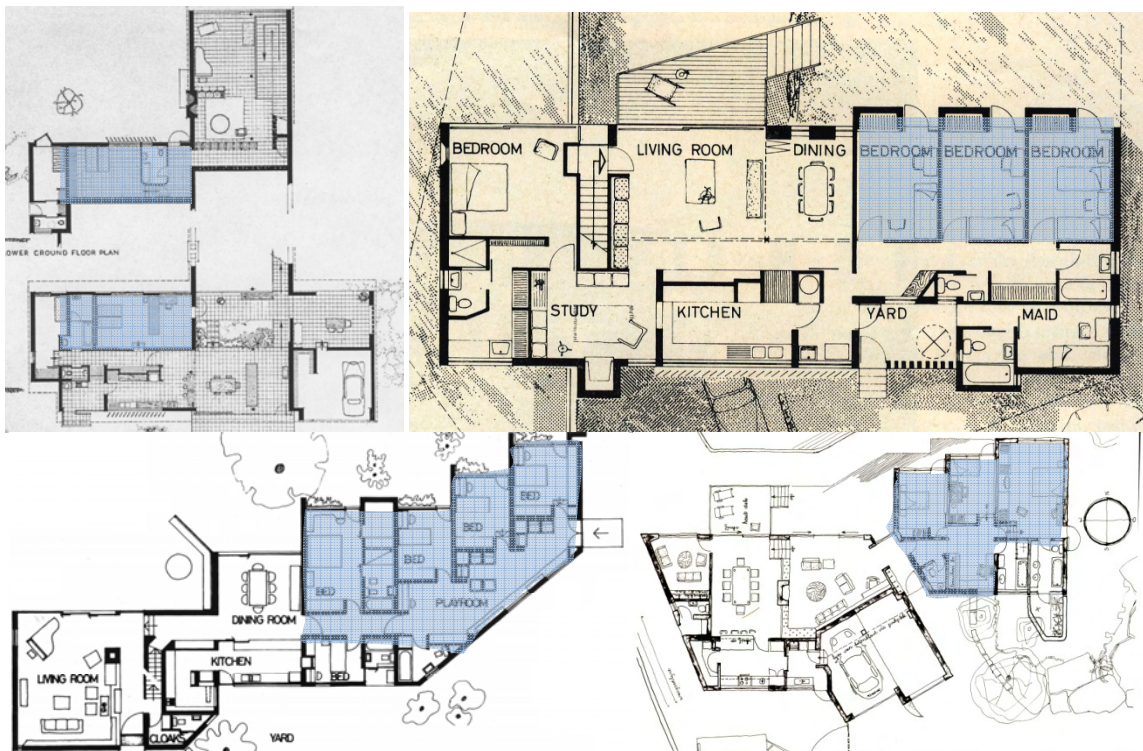


Figure 10.37. Part plans showing relationship of bedrooms to the exterior. **Top left:** House Lombard (c. 1960s) in Nylstroom by Karl Jooste - note the slight wall splay (Courtesy of Cultural History Museum Pretoria). **Top right:** House Bertie-Roberts (1965) (Anon, 1968:12). **Second from top left:** House Blommaert (1982) (Fagan archive - Job No. 8204). **Second from top right:** House Raynham (1967) (Fagan, 2005a:52). **Second from bottom left:** House Swanepoel in Cape St. Francis (1980) (Fagan, 2005a:73). **Second from bottom right:** House Neethling (1983) (Fagan, 2005a:83). **Bottom left:** House Swanepoel in Hermanus (1990) (Fagan 2005a:103). **Bottom middle:** House Paradys (2003) (Author, 2009). **Bottom right:** House Fagan in McGregor (2005) (Fagan archive - Job No.0507, undated).

10.4.6. Functional separation (see Fig. 10.38)

Many of the interior organizations of Fagan's houses echo the bi-nuclear planning arrangement used by Marcel Breuer²⁵⁰. The 1951 Keurbos house clearly separates living from sleeping areas on both levels. In Die Es a vertical separation is used but the regularity of the bi-nuclear arrangement is returned to in houses Bertie-Roberts (1966), Raynham (1967), Neethling (1983), Paradys (2003), and Mitchell (2005). In houses Swanepoel in Cape St. Francis (1980) and Fagan in McGregor (2005) the living space becomes a mediator between sleeping spaces on each side. Most plans also rely on a served and servant arrangement, with bathrooms and kitchens positioned on the colder and less open side of the site. Exceptions are notably the architect's own houses where the bathrooms face the sea.



²⁵⁰ Fagan clearly describes how Breuer achieves this separation in the 21 April 2008 interview, but explains that client requests drove the programmatic separation. Although this may be the case, the formality of the linear organization follows Breuer's approach very closely.

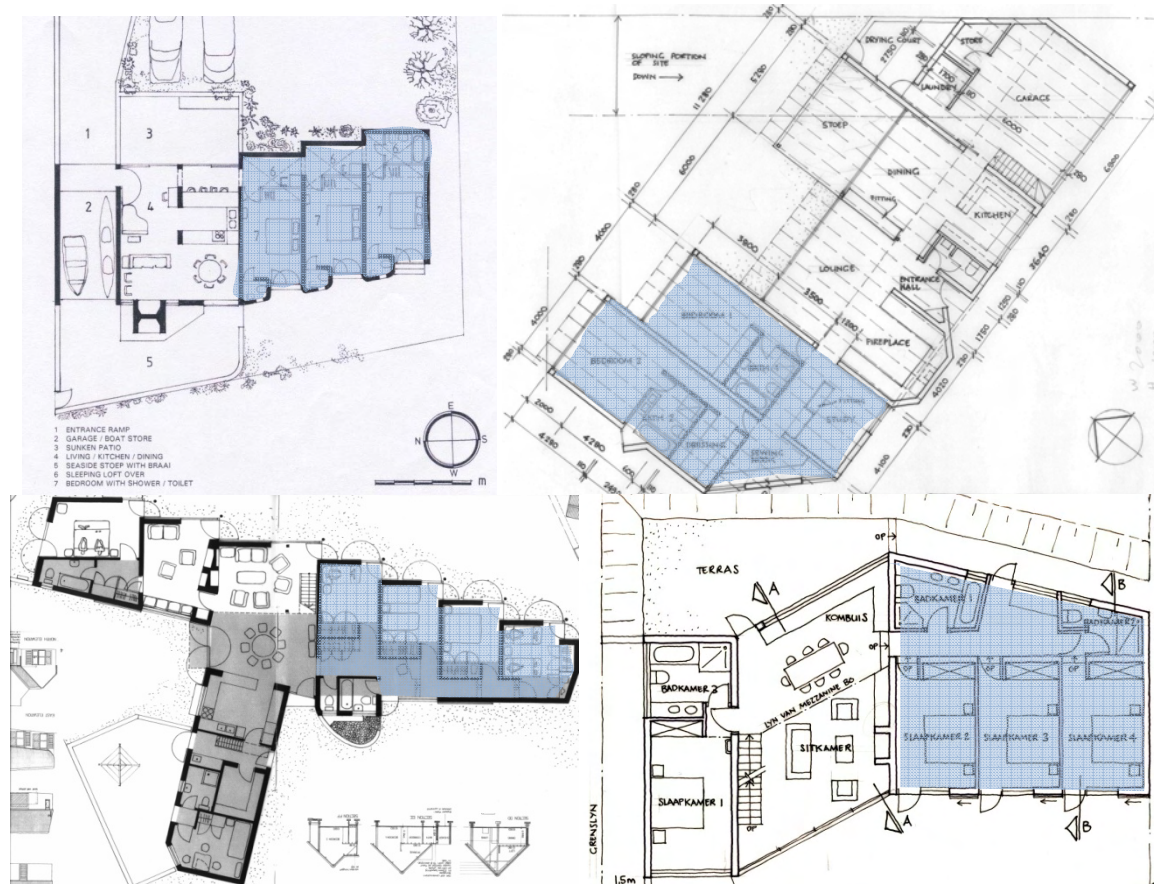


Figure 10.38. Blue areas indicate bedrooms and associated spaces. **Previous page top left:** House Keurbos (1951) (Wale, C.1964:50). **Previous page top right:** House Bertie-Roberts (1965) (Anon, 1968:12). **Previous page bottom left:** House Raynham (1967) (Fagan, 2005a:52). **Previous page bottom right:** House Neethling (1983) (Fagan, 2005a:83). **Top left:** House Paradys (2003) (Fagan, 2005a:125). **Top right:** House Paradys (2003) (Author, 2009). **Bottom left:** House Swanepoel in Cape St. Francis (1980) (Fagan, 2005a:73). **Bottom right:** House Fagan in McGregor (2005) (Fagan archive - Job No.0507, undated).

10.4.7. The roof as holding element (see Fig. 10.39)

The double pitched moulded roof typology is used by Fagan most successfully to create a sense of both plasticity and unity. Houses Raynham (1967) and Neethling (1983) are similar in their copper forms rising to the focal point of the chimney in the living room. The roofs form almost awkwardly at times but are strong elements that control and hold the spaces below. A volumetric interaction between room and roof space occurs and boundaries are seemingly blurred in a continuously flowing interior space. This continuity is less evident in House Swanepoel in Cape St. Francis (1980), but the roof still holds powerful sway over the internal spaces and external walls, allying itself to the slope of the dunes below. At Die Es (1965) a sinusoidal roof form holds the upper floor spaces together. Glazed sections above the internal doors foster a spatial continuity that allows the roof to lightly control and hold the private spaces.



Figure 10.39. **Top left:** House Raynham (1967) (Photo courtesy of the Raynhams). **Top right:** House Neethling (1983) (Author, 2009). **Bottom left** House Swanepoel in Hermanus under construction (1990) (Fagan archive - Job No. 9020, undated). **Bottom right:** House Die Es (1965) under construction with Fagan and his son Hennie working (Fagan archive - Job No. 656, undated).

In early sketches of House Simpson (see Fig. 10.40), Fagan organizes a series of independent roofs that rise to the climax of the chimney in a very Frank Lloyd Wrightian way – Taliesin West is mentioned on one of the sketches.



Figure 10.40. Fagan's sketch of the roof to House Auldearn (1993) with reference to Frank Lloyd Wright's Taliesin (Fagan archive - Job No. 9302, undated).

10.5. Summary

Fagan has manipulated the formal, spatial and functional canons of a mediated Modern Movement and the Cape vernacular to create his own unique typologies. The design solutions alternate between generative interpretation and productive invention, and in so doing create a new and appropriate local architectural language that synthesizes the new and the old. The new patterns are convergent solutions in the sense that they are constantly used but are reworked in each new design. The typological solutions provide the architecture with a recognisable signature but avoid stylistic monotony.

SECTION E

FINALE

This section summarises the intentions and outcomes of the study, lists references used and includes appendices that provide additional and referenced information for the study.

Chapter 11

CONCLUSIONS



House Beyers (1998) (Author, 2009), House Ida's Valley (1975) (Author, 2009), House Swanepoel in Cape St. Francis (1980) (Author, 2005).

This section will conclude the study:

The purpose of the study will be summarised.

Important results from the enquiry will be outlined.

The effect Fagan has had on architecture in South Africa will be described.

Issues that require further investigation will be pointed out.

11.1. Purpose of the study

This study has set out to undertake a critical analysis of the domestic architecture of Gawie Fagan so as to define its uniqueness in the South African architectural landscape, and assess the contribution the architect has made to the establishment of a place-specific architecture that is nationally and internationally recognized. This was done to increase the limited written knowledge on South African architects' work and to add to the critical debate on South African architecture.

11.2. Results of the enquiry

11.2.1. Problem one:

The first problem was the determination of a research strategy. *It was hypothesised that Fagan's domestic architecture mediates between architectural dichotomies and relies on a typological approach that exhibits formal and spatial tensions; that the architecture can be described as heterotrophic and attenuative; and that a research strategy needed to be formulated that could highlight these attributes.*

11.2.1.1. Result one:

A literature survey of international and local architects whose work bears similarities to Fagan's approach highlighted the importance of practical skills, technological inventiveness, pragmatic design approaches, an appreciation of local vernaculars, and a Modern Movement architectural education.

It was argued that an investigative approach will be undertaken through case studies and written work. This approach has built on the existing texts on the architect's work in a critical manner, by mediating between descriptive and normative approaches. In a similar way it has attempted to complete the study through a synergetic analysis that combines 'laws and instances' and 'cases and interpretations' research strategies.

An investigative strategy of heterotrophic syntheses was proposed which suggests that mediation occurs between dichotomous architectural influences such as the Modern Movement and the inherited Cape vernacular. Fagan sits at the centre of this mediatory process. His tools are his influences, design talent and imagination. The resultant attenuative solutions are not static outcomes but shift (in a formal sense) on an imaginary scale that links the two polarities.

As Fagan's work demonstrates typological tendencies, a summary of historical and productive typological approaches identified a close alignment with vernacular and Modern Movement

influences.

11.2.2. Problem two:

How will Fagan's architecture be contextualised? *It was hypothesised that the domestic architecture of Fagan displays similarities to international examples of regional modernism, and exhibits linkages with post-Second World War regional-modern attitudes in South Africa, as well as close similarities to a 1950s and 1960s neo-vernacular in the Cape region.*

11.2.2.1. Result two:

Vernacular architecture has been defined as a traditive process that demonstrates a consistency, repetition and development of an approach to establish a new architectural tradition. A seminal neo-vernacular emerged in the 1950s and 1960s in the Western Cape, South Africa. The inherited Cape Dutch tradition was adapted through the influences of the British occupation along with Arts and Crafts influences through Baker and his later following. Architects such as Fox and Pahl attenuated replicative and interpretative approaches to merge inherited vernacular principles and Modern Movement influences to form a fourth Cape vernacular.

Mediations between an already mediated Modern Movement canon and local circumstances gave rise to a sophisticated regional modern architecture in Pretoria during the 1940s and 1950s. The problems stemming from the stylistic application of the International Style, climatic effects, available materials and the economic legacy of the Second World War forced architects to find innovative ways of dealing with the exigencies of place and modern functional requirements. The legacy of a third Modern Movement in Pretoria provided a solid foundation for the development of Fagan's reflective modernism. His pragmatic education and the influence of a cohesive and powerful group of regional practitioners and teachers in Pretoria paved the way for an architecture that would mediate a centuries' old tradition with new ways of living and alternative technologies.

Regionalism has been defined as a conscious architectural choice that reacts to universal and revivalist standardizing tendencies. It has been argued, in a Mumfordian sense, that mediative approaches seek to resist and accept standardizing tendencies to form a regionalism that straddles the boundaries of tradition and modernity in both imitative and inventive ways. The legacy of a strong mediative regionalism in Pretoria formed the basis of Fagan's architectural approach.

11.2.3. Problem three:

What aspects (personalities, activities, events) have influenced Fagan's architectural responses over time? *It was suggested that important influences such as upbringing, education and experience impact on the development of architectural philosophies and approaches.*

11.2.3.1. Result three

Fagan's heterotrophic architecture was initiated during an inventive childhood. The nurturing environment and inherited skills fostered creativity and set the platform for mediation. An engineering and regional-modern architectural tertiary education furthered Fagan's ability to reconcile contradictory influences, and this finally found expression in his first house - Keurbos built in 1951 – that expressed a mediation between tradition and modernity. Later at Volkskas Bank Fagan reconciled the necessities of corporate expression and the vagaries of context. Thereafter a personal and unique architecture developed through the mediation of new and restoration work.

11.2.4. Problem four:

What architectural philosophies (theoretical or practical attitudes) has Fagan developed as responses to the inherited vernacular, the Modern Movement and regionalism? *It was suggested that philosophies or attitudes lead to the development of architectural strategies and design approaches and that Fagan has developed a fourth Cape vernacular, a reflective modernism and a relative regionalist approach to architecture.*

11.2.4.1. Result four:

Fagan's first house, Keurbos (1951), set the tone for the exploration of a domestic architecture that expresses a mediated condition between the inheritances of the Cape vernacular and an already mediated Modern Movement. Fagan's mediations have 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.

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'.

11.2.5. Problem five:

What is Fagan's design process? What is his approach to the development of architectural form? What are the architectural responses that Fagan has made over time? *It was hypothesised that Fagan's design process mediates between the polarities of intuitivity and rationality and that he has developed architectural strategies to mediate formal, functional and spatial polarities, generated by the principles of the inherited vernacular and modern day functional and technological requirements. It was also suggested that he has developed a new set of architectural typologies.*

11.2.5.1. Result five:

Fagan's design process is a rational pursuit that is initially divergent with nuances of convergent thinking. Later, design development processes become convergent through Fagan's use of tried and tested typological solutions. This method of working does not dilute the uniqueness of solution that is aptly suited to each site and program. Fagan mediates 'external' and 'internal' design influences to deal with the exigencies of site and program, his education, and life experiences.

Fagan's heterotrophic architecture has been formed through the mediation of two influences, namely an inherited vernacular tradition and a mediated Modern Movement education. Further mediations have been made between these influences and the exigencies of site and client requirements, with Fagan acting as the mediator in a process of conversion and assimilation. A series of formal tensions is created that allows the resultant architectural form to reverberate on an imaginary scale of resolution and opposition.

The dialectics of science and experience are mediated through the use of familiar architectural forms such as the chimney and sheltering roof, and haptic experience through the establishment of the architectural promenade. Formal and contextual dichotomies are mediated through classic and organic formal manipulations, the acceptance of commonalities between Cape and Mediterranean architectures, classic and romantic contextual relationships, and static and dynamic form making. The oppositions of inside and outside space are mediated through

considerations of approach and entry, the vehicle and the pedestrian, front and back, thresholds and boundaries and introverted and extroverted spatial arrangements. Formal and functional oppositions are reconciled and contrasted by the tectonic means of frame and enclosure, space and volume, and focus and function. Lastly, the polarities of traditional technique and technological invention are mediated by the abilities of an individual with years of experience in inventing and making to create new stereotomic and tectonic relationships and to merge age-old techniques with modern materials and practices.

Fagan has manipulated the formal, spatial and functional canons of a mediated Modern Movement and the Cape vernacular to create his own unique typologies. The design solutions alternate between generative interpretation and productive invention, and in so doing create a new and appropriate local architectural language that synthesizes the new and the old. The new patterns are convergent solutions in the sense that they are constantly used but are reworked in each new design. The typological solutions provide the architecture with a recognisable signature but avoid stylistic monotony.

11.3. The effect that Fagan has had on architecture in South Africa

The award of a Gold Medal to Fagan for his contribution to architecture in South Africa in 1988 is a testament to the regard in which the local profession holds him. This is confirmed by the sixteen other awards from the South African and Cape Institutes for Architecture and the many other national awards received from bodies such as the National Monuments Council and the South African Academy of Literature and Science. The honorary membership of the American Institute of Architects in 2009 demonstrates Fagan's international standing.

Fagan has contributed to architecture through his respect for tradition, the development of a design methodology of 'first principles' and the manipulation of technology as craft. Fagan's deep understanding, knowledge of and experience with the 300 year old inherited Cape architectural tradition has allowed him to develop and refine a series of formal and spatial principles that he uses in his domestic architecture. These have fostered new typological solutions that have the Cape tradition as their foundation but which are manipulated to suit modern conditions. The effects of Fagan's inventive childhood and pragmatic education at the University of Pretoria have inculcated a working methodology of 'back to basics'. The architect approaches each problem with circumspection, eliciting requirements and elucidating inherent possibilities. His knowledge of traditional construction methods and new technologies from his sailing exploits have fostered an approach to making that borders on craft but in which the advantages of both are presented in the houses.

The importance of an architect's work can also be measured by the influence he has had on a

younger generation of architects. In a direct sense he has influenced the approaches of architects that have worked for him such as Lourens, Dodds, Rennie and Wilson-Harris. It is interesting to note that Fagan has affected and impacted all of the architects that have worked for him through his approaches to the making of architecture and not through stylistic influence. Lourens (2012) highlights the experiential qualities and importance of the architectural promenade:

Most of the influence ... is subconscious, I think. Therefore difficult to put a finger on. When I think of one thing then other incidents in other practices come to mind also. However, I think he had a large influence on me in two aspects of my work. Firstly, in my understanding that architecture is an experience and not an object. Elements thereof were present before I worked with him, but in his office it developed relevance. Hence my obsession with arrival! Arrival at any point outside or inside. Secondly, how space is read. I used to throw everything at each individual space ... But, it is the overall space which matters and how it is defined. These are always simple and understandable. Yet, once these are defined, they are manipulated to satisfy a multitude of options. I am not suggesting that my work reflects this, but I think of these while I am working and I try to at least recognise this.

The renowned Cape Town conservation architect John Rennie comments (2012b) that

it was an education. Both of Pearse's books were at hand as well as construction manuals. Fagan had just begun with the restoration of La Dauphine and I had to measure up these old buildings. This experience and Fagan's 'looking over my shoulder' presented many learning opportunities.

Dodds notes (2009) that "thorough research led to appropriate decisions from the larger picture to the finest detail like door handles. Designs were reworked until a refined quality had been achieved and this was far more important than worrying about how much time it took". Dodds also notes that Fagan's contribution to architecture has "extended beyond just his buildings".

Wilson-Harris explains (2012) that

from Fagan I have learnt that there is value in designing buildings to suit the site, to working with weather constraints, orientation, topography, context, views and human scale. These primary concerns support responsible design but there are also the unmeasurables of creativity, wit, modesty, restraint, clarity of thought and perhaps even left handedness that make his work unique.

Indirect stylistic influences can certainly be noticed in the work of architects such as Martin Kruger, Piet Louw and Heinrich Wolff. Martin Kruger (2012) highlights the influence of the tectonic qualities of Fagan's buildings:

I am always inspired by Gawie's thinking about finishes and simplistic detailing methods ... Eenvoudige "Karoo details" as I call them (farm-like, workman like). Gawie made a point once about European architects that want everything "perfect" – and said

but here in Africa it's different (as in South America) - referring to his own "unfinished" house(!). His determined attention to detail is inspirational. Where old meets new in architecture - e.g. Boschendal and the Castle. I would like to think that this unpretentiousness has influenced our work where appropriate: understated, simplicity, Karoo details.

Lastly, many an architect has been inspired by, as Kruger puts it (2012), "[i]ndirect influences from seeing and experiencing his buildings". On a regular basis, student groups from universities around the country and visiting groups of international architects make a pilgrimage to Die Es. This author was personally party to a visit by German architects to the house in April 2008, two weeks after a visit by a student group from Bloemfontein. On subsequent personal visits the spaces and tectonic qualities still excite the senses and inspire one to push the boundaries of form and space.

11.4. Issues that require further investigation

This study is limited to an analysis of Fagan's domestic architecture. But the oeuvre of Fagan's architectural work is broad and extensive, ranging from conservation projects to new work and domestic to commercial and institutional buildings. It is beyond the scope of this study to directly correlate the influences of other concurrent non-domestic work on the design of Fagan's houses, a study which would directly highlight other, more external, yet related design influences.

The development of a Fourth Vernacular in the Cape Region has highlighted the work of other architects working in a similar vein to that of Fagan. A more in-depth study of architects other than Fox or Pahl (such as Munnik and Abramson) would provide critical insight in the seminal work undertaken in that part of the world in the 1950s and 1960s, and would bolster the limited published work that exists on this period.

The influence of Karl Jooste on Fagan was touched on in a very limited way and concentrated on their mutual admiration for the work of Le Corbusier. Jooste's untimely death put paid to a talented architect's career but the limited built work in the domestic sphere warrants an in-depth study that can highlight another path taken by a Pretoria graduate that, in a way similar to Fagan's, has synergised a regional-modern education with the exigencies of place and climate.

11.5. End note

The analysis of Fagan's work is inevitably distanced and draws on direct experience of the buildings, readings (in both senses of the word) of his texts and my discussions with him and his wife. As Fagan once remarked "*ek is te na aan die werk om so daarna te kyk*" [I am too close to the work to look at it like that] so my critiques may be layered with issues that are less important or

relevant to the context, time or circumstances in which the buildings were created. My interpretations are personal and I have endeavoured to limit an over-academic analysis of the work.

I am hopeful that the study will be of benefit to the architectural fraternity at large and students in particular who wish to develop their own unique way of working. Fagan's work is seminal in the South African context and, although not without its idiosyncrasies, sets a high standard to emulate. There is yet to be another South African architect who has created such a consistent, yet innovative, body of domestic architecture that expresses so clearly the development of a regional vernacular that mediates two inherited traditions, namely the Cape vernacular and a mediated Modern Movement, and in such a sophisticated manner. Fagan's domestic architecture is truly timeless and expresses his wish (1983:1) that architects (in the Southern region of South Africa) should be striving for an architectural language that "belongs and is appropriate to the Cape".

Chapter 12

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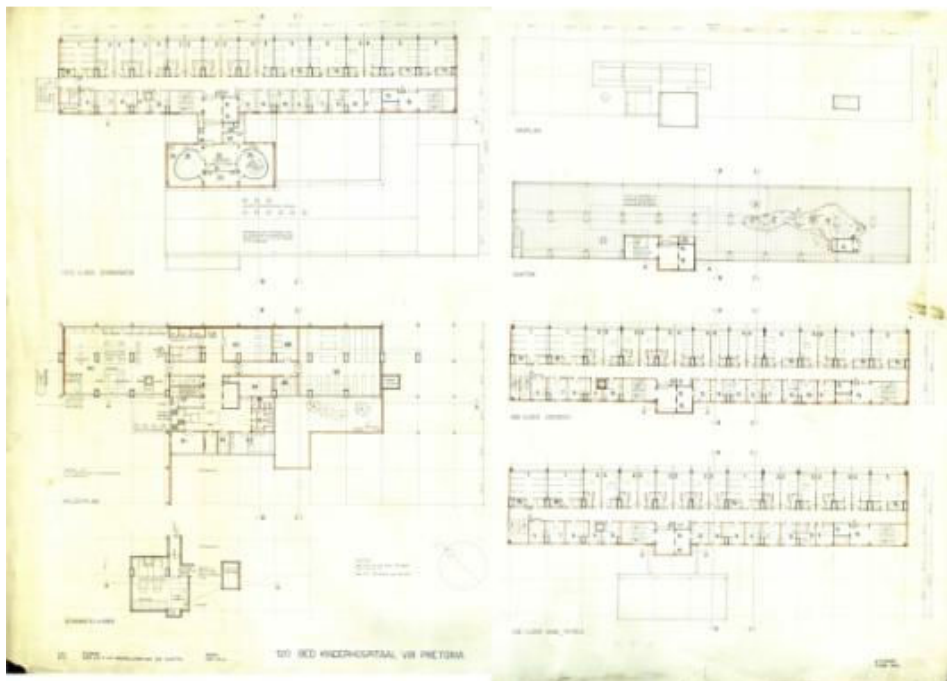
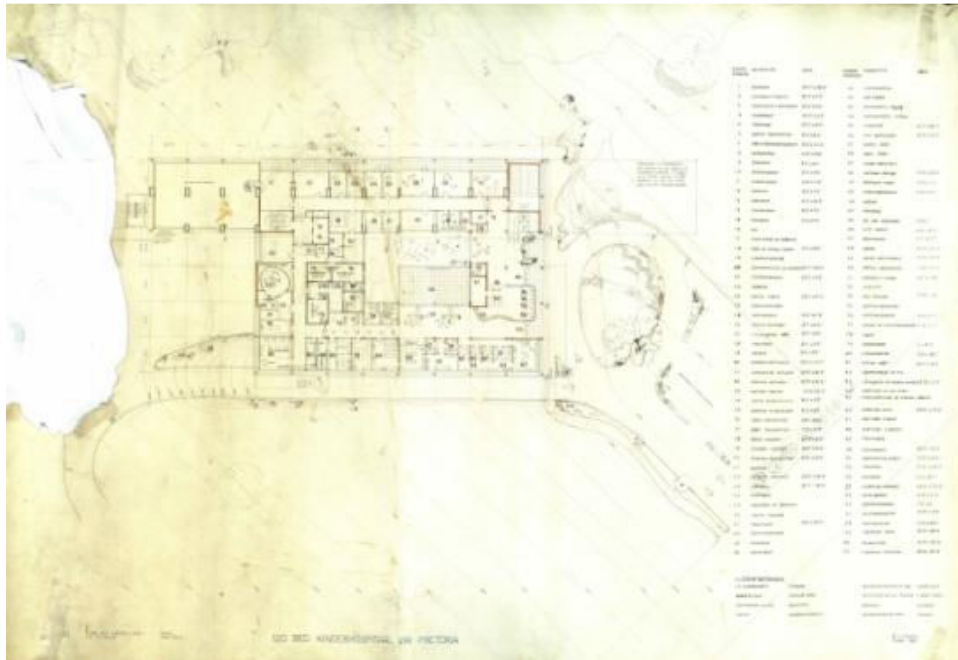
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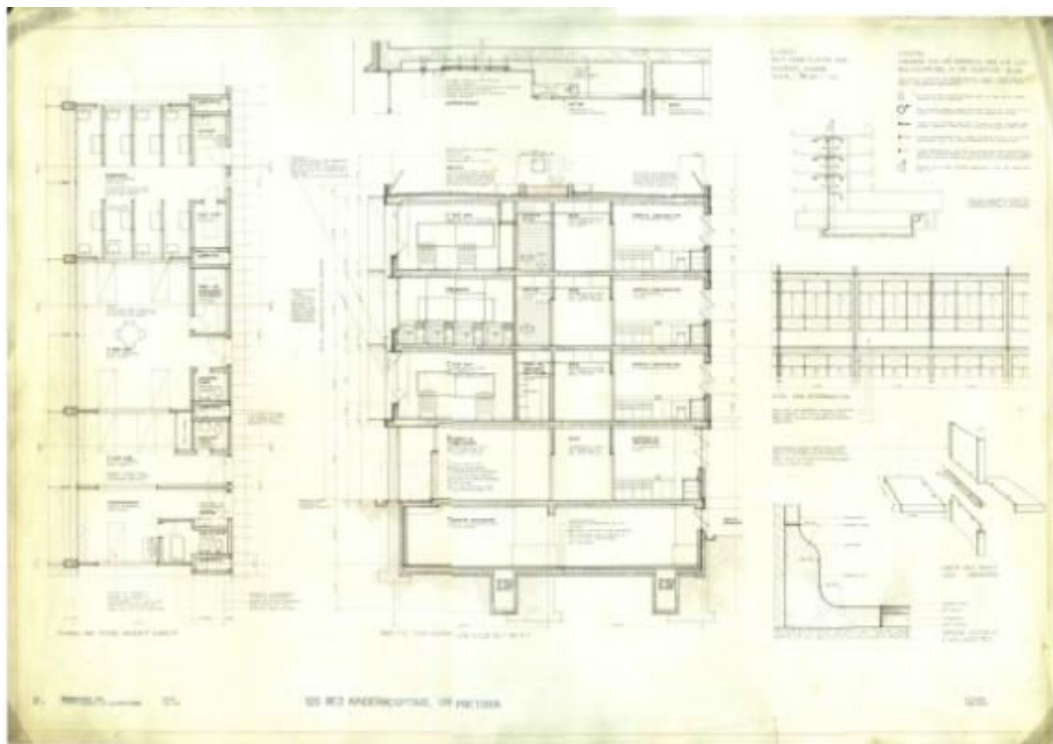
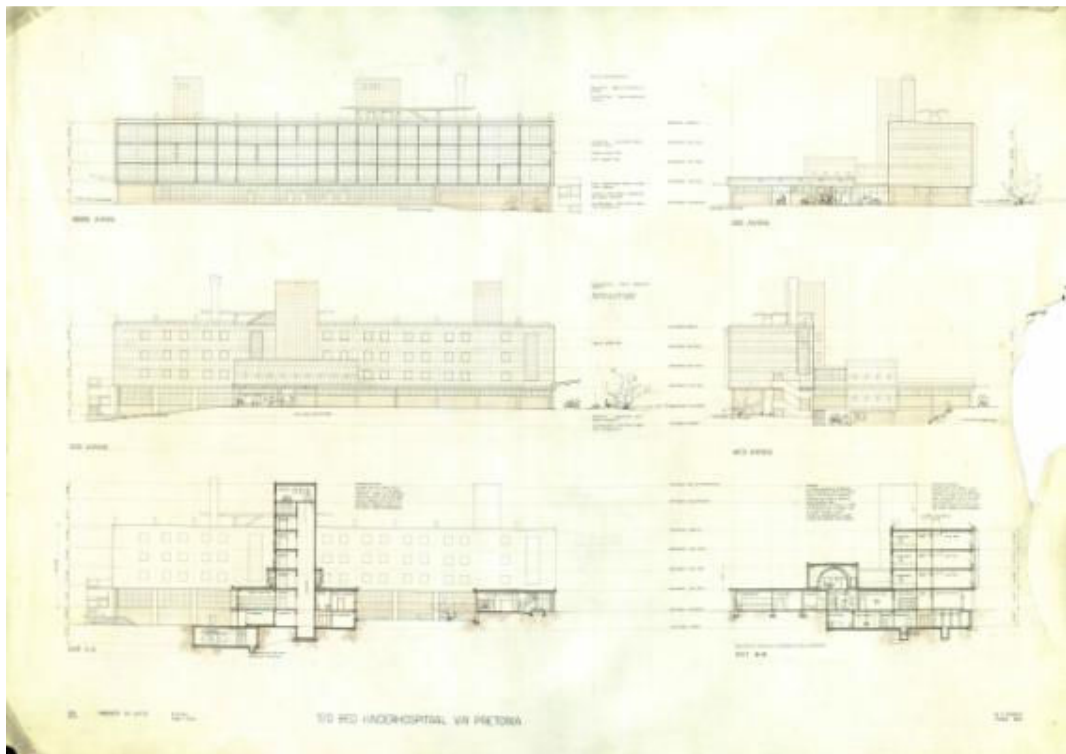
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13.7 APPENDIX G

STUDENT WORK

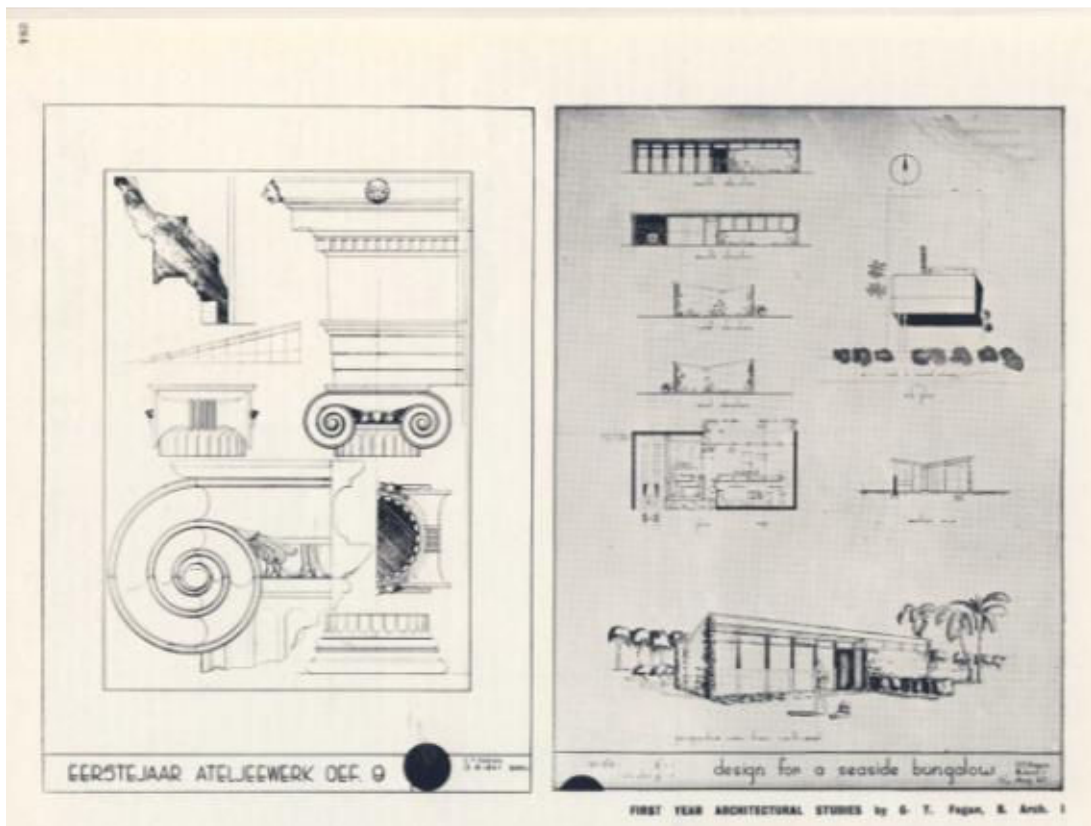
FAGAN'S THESIS:





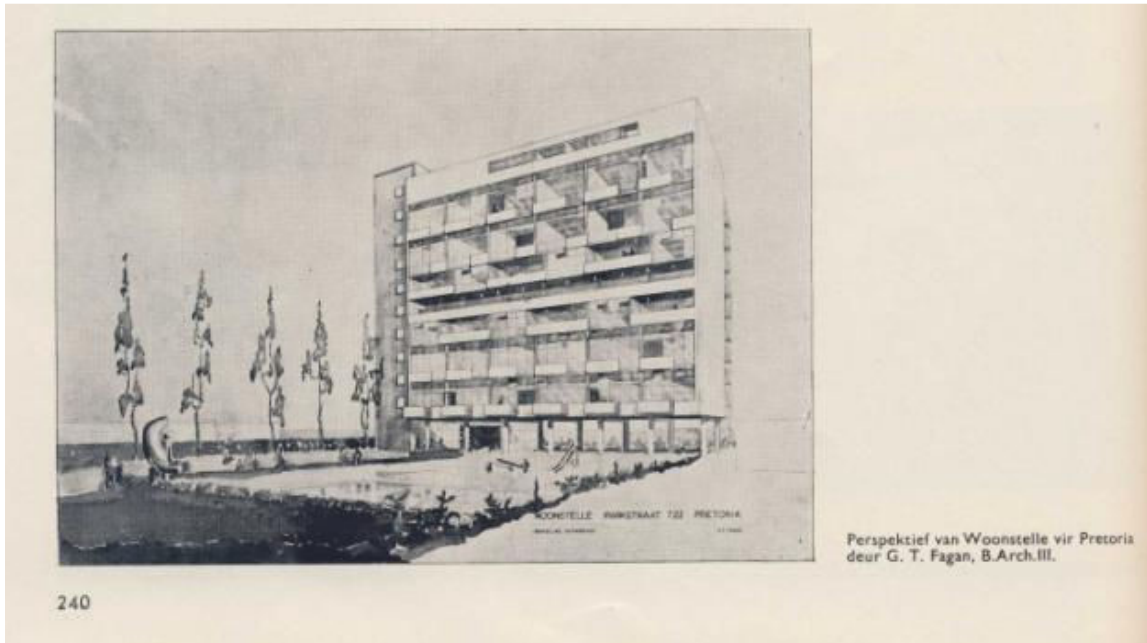


FAGAN'S FIRST YEAR WORK:





FAGAN'S THIRD YEAR WORK:



13.8 APPENDIX H

FAGAN'S LIBRARY











13.09 APPENDIX I

INTERVIEW QUESTIONS and FAGAN'S RESPONSES TO EMAIL QUESTIONS

	Person/s	Relationship	Date	Location
	THE ARCHITECT/ HIS WIFE			
1	Fagan, G.T. and G.	n/a	26 March 2008	156 Bree Street, Cape Town
2	Fagan, G.T. and G.	n/a	18 April 2008	156 Bree Street, Cape Town
3	Fagan, G.T. and G.	n/a	21 April 2008	156 Bree Street, Cape Town
4	Fagan, G.T. and G.	n/a	30 April 2008	156 Bree Street, Cape Town
5	Fagan, G.T.	n/a	1 February 2009	Die Es, 32 Woodford Avenue, Camps Bay
6	Fagan, G.T.	n/a	1 September 2009	Paradys and House Brink, Langebaan
7	Fagan, G.T. and G.	n/a	July, 2010	156 Bree Street, Cape Town
8	Fagan, G.T. and G.	n/a	12 February 2012	156 Bree Street, Cape Town
	CLIENTS			
9	Mr. and Mrs. Mitchell	Clients and owners of House Mitchell (2005), Newlands	17 October 2009	21 Cedar Road, Newlands
10	Dr. and Mrs. Raynham	Clients and owners of house Raynham (1967), Newlands	23 June 2009	16a Boshof Avenue, Newlands
11	Mr. and Mrs. Simpson	Clients and owners of house Auldearn (1992), Elgin	1 May 2009	House Auldearn, Elgin
12	Mrs. Beyers	Clients and ex-owner of Nagenoeg (1998), Betty's Bay	4 April 2009	Woolworths, Durbanville
	STAFF			
	John Rennie	Ex employee (1966 to early 1970)	2 July 2009	15 New Church Street, Cape Town



	Henk Lourens	Ex employee (February 1980 to February 1981, August 1981 to July 1983 and February to April 1995)	10 December 2008	14 Beta Close, Bakoven
	Moira Serritslev	Longest serving ex employee (September 1978 to 2004)	28 May 2009	15 Milner Road, Woodstock
	Louis Steyn	Ex employee (October 1981 to July 1982)	February 2009	11 Waterford Mews, Century Boulevard, Century City
	Oliver Dodds	Ex employee (January 1983 to August 1990)	19 May 2009	55 Andrews Road, Hout Bay
	John Wilson-Harris	Current associate (2nd longest employee) in Fagan's practice (January 1994 to present)	8 October 2009	156 Bree Street, Cape Town
	FAMILY			
19	Hannes Fagan	Brother	2 June 2009	22 Queens Road, Tamboerskloof
20	Henry Fagan	Son	18 June 2009	154 Bree Street, Cape Town
21	Helena Fagan	Daughter	26 November 2009	Die Es, 32 Woodford Avenue, Camps Bay
	FRIENDS			
22	Shelagh Nation	University friend	27 November 2008	Boukunde Building, University of Pretoria
23	Johan Jooste	Son of university friend Karl Jooste	29 September 2008	381 Aries Street, Waterkloof Ridge, Pretoria
	ACADEMICS			
24	Gus Gemeke	Ex University of Pretoria and employee of Karl Jooste	29 September 2008	Boukunde Building, University of Pretoria
25	Gert Swart	Ex University of the Free State	24 September 2008	Faerie Glen, Pretoria
26	Bannie Britz	Ex head of the architecture department at the University of the Free State and friend of Fagan's	July 2008	The Roodt Partnership offices, Bloemfontein
27	Dr. Wally Peters	Ex University of Natal and currently University of the Free State	November 2008	Architecture building, University of the Free State

INTERVIEWS WITH FAGAN

Meeting with Gawie Fagan and Gwen Fagan on Wednesday 26 March 2008

Gawie is in a meeting but I am greeted by Rozelle and offered some rooibos tea. Gawie comes over after a few minutes, apologizing for being held up. He tells me that Gwen will come and talk to me in the meantime and he then phones "mamma" to bring down 'the book'.

Gwen introduces herself and tells me that Gawie has been nominated to become a member of the American Institute of Architects (I later find out it is Adele Naudé Santos who has instituted the nomination) and that she has had to put together information to support his application. This has now been done and they are off to Boston very soon.

She shows me the catalogue in three blue bound bundles with plastic sleeves with photographs and copies of articles and drawings. She generously offers me the work to look at and copy when I want, but clearly indicates that the information cannot leave the office.

She starts showing me some of the bound work and the conversation begins with Gawie's life as a child, growing up in a creative environment with an actress mother and writer father. Interior decorating was also a passion of the mother and both parents were involved in politics. They lived in Rondebosch and Gawie went to Grootte Schuur and later the fancy Afrikaans High School in town (the name escapes me). Gawie rode by bicycle from Rondebosch to town every day. He was good with his hands, having been influenced by a "queer" neighbour (or was it family member?) who got him to make things. His brothers did not have the same creative talents and Gawie was definitely his mother's child.

Played the guitar and even made an electric guitar and played jazz with a quartet. He also plays the piano and spent three years studying engineering at UCT after standing in the same queue on registration day as his brother! He did not do very well and his parents thought he was wasting his time (Gawie says he wasted three years) and packed him off to Pretoria University to study architecture and, according to Gwen, he has never looked back.

We then discuss some of the houses, in particular Gawie's mother's house in Bishopscourt and their own house in Camps Bay. Gwen was quite vociferous that Gawie is an original thinker and that his work isn't influenced. She later clarifies this by referring to the lecture Gawie gave about those principles of Cape architecture that he often refers to in his work. I got the impression that she doesn't want to acknowledge that he is consciously influenced by other architecture. She says that Keurbos is about how one responds to the site and climate and that's why rock is used to signify the grounding of the building.

Gawie later admits that a Le Corbusier house ?? was an influence and that a ramp is a waste of space really. Of his university influences he mentions Le Corbusier at one end of the scale and Niemeyer at the other. It seems (after questioning) that it is not so much that they were taught about these architects but that they bought the books, for example Gawie would purchase each publication of Corb's *Oeuvre complete*. I asked him about the Papadaki publication on Niemeyer and Gawie said he bought it at the time and still has it.

Gwen spoke about the years after leaving university. Gawie took up employment with Volkskas as an architect. It was a time of new beginnings for Afrikaans banks. About 50 banks were designed in the 10-12 year period he was with them. He suggested lots of glass in the facades and the initial response from management was rather negative. He then questioned what they had to hide and after that they boasted about the fact that they in fact had nothing to hide. Lots of driving had to be done to get to the banks and Gawie attempted to persuade them to let him fly. They were rather reluctant and only after Gawie's suggestion that he buy the plane and charge them road mileage did the idea fly (excuse the pun).

When I ask Gwen about the Cape influence directly she mentions Pearse's book and the student trip that Gawie made with his fellow students and lecturer (? which one) to the Cape where they went from farm to farm and studied the buildings. I later ask Gawie whether it was this experience that made him 'fond' of Cape architecture and whether his Cape childhood did not also have an effect. She thinks both and later Gawie says he cannot pinpoint it really. He says that the Cape architecture of heavy mass is appropriate in the Mediterranean setting and his house in Camps Bay has a very even temperature, the Langebaan house being similar but he admits that it is perhaps a bit too chilly.

Gawie's first son was born in his final year of study, and while working for Volkskas he and Gwen bought a farm outside Pretoria (it seems it had belonged to an old lecturer - Basil South) and there they farmed with cows and milk with quite new technology. Later on things became difficult and they had to buy feed etc. When

Gawie's father died they decided to move back to CT and lived with his mother (presumably in Keurbos). He did some small projects and they bought the plot in Camps Bay with very little money and started building, mostly by themselves. Evidently the roof was built by only Gawie and one 'coloured man'. The children and Gawie's mother helped too. They moved into the lower floor of the house when there were no windows and the children had to tie down their blankets when the south easter blew!

Gawie concludes his meeting and walks over rather shyly. I explain my intentions and mention that I am only aware of one 'monograph' of an architect's work in this country, namely that of Martienssen. Gawie remarks that he has never thought about that before and says again that he is flattered by my study.

We move to the curtained boardroom area and Gawie carries my tea tray, the tea now cold from the long conversation with Gwen. He offers to warm the cup and I politely decline. I explain my sheet of world and local happenings with his years next to it, starting in 1925 with his birth. He notes Eaton's sojourn in Europe as a Rome scholar when he was seven and comments rather strangely about old "grubby". Can't remember why they called him that though but says he wasn't a great teacher – not there often but that his work spoke volumes – they would be taken to his buildings evidently. Mentions Cole Bowen as a detailer and spoke highly of Basil South and Jooste, who was younger by a year but at a higher level due to Gawie's UCT sojourn. Jooste evidently died in a head-on car crash in the mid 1960's – a young 40 odd year old. Gawie seems impressed with him as a designer.



FAGAN'S NOTES TO MY QUESTIONS OF 1 APRIL 2008

NB: Fagan should explain that who is already busy with a book

ARTHUR BARRER
Thesis for Doctorate

"QUESTIONS" FOR MR. FAGAN
1 April 2008

Notes: Hah, snelkeif, music
Meades: Kumsinning's Sweetbread music - Leonardo - Links embri - sprekeif

1. More about parents and upbringing. Their influence on you.

2. What type of house did you stay in as a child? Rondebosch, Newlands?

Latin Afr, English, Maths, Science, History

Avenue Rd, 11 to Dean St. Rondebosch?

3. Subjects taken at school. Were you good academically? Did you excel at sport or were you good at both? Cultural activities, music etc.

4. Neighbour who encouraged working with hands??

played tennis - Harold but played quite often. Herman Pedersen a turning for diving helmet
Pedersen's Bronze casting
Mother - Plasticine

5. The "love" of Cape architecture - you have already mentioned that it is appropriate in terms of climate and enclosure but who introduced the buildings to you - was it the lecturers at Pretoria or school outings or parents?

Drives with parents into Stellenbosch - Swellendam areas

6. The friendship with Barrie - how did you meet and what was it that you had in common? Did you discuss the appropriateness of Cape responses? The white wall and shutter look was quite prevalent in his own house and that of some of Building Design Group work in Natal in the 1960's.

Barrie? Winner is "Buckings" getters due Barrie?

Visited our small holding in Pta.

7. I would also like to know if there are any other architects (either nationally or internationally) that you have had contact with and discussed issues around architecture that is critical to your work.

Peter Buchanan?
Herman? Karel Jozette vis Norman Eaton

8. You mentioned Basil South as being quite influential at PTA university. There was a regionalist slant at the time which was a move away from the orthodox modernism of Wits. You mentioned that you were aware of this more by the books that you bought than by the architecture being taught, so was your own leaning towards a regionalist architecture brought on the "sub conscious" educational environment or just a self awareness that this type of architecture was more appropriate and that people like Corb and Niemeyer were now making this "type" of architecture.

The term Regionalist was not current but we were certainly taught to respond to the site rather than style -

9. Thoughts at the time about the Keurbos house while at Pretoria. You mentioned the strong Le Corbusier influence (couldn't catch the name of the building you mentioned) and the influences of the site. How did you go about designing the house while studying? Did you have enough time? Was it done quite quickly?

Corb only regarding the rooming (Enlarging)

Front door only now!

10. Although each design task is different do you have a particular way of approaching design problems or opportunities. Do you write or talk or sketch? Is it a private undertaking or is discussion with others important?

Lately with Gwin
Dis Es Scale from sketch.

11. Mrs. Fagan mentioned the "principles" of Cape architecture that you regard as being important. How did you arrive at this understanding? In hindsight perhaps or was it a conscious introduction by others or through experience with conservation work? Are these principles written down somewhere?

Lecture - get it out - Own experience. (200 projects!)

12. Where would you say that you lie on a scale of "rational" to "intuitive" design ability.

Pos a problem when going to sleep. (Under a month)

13. I love looking at design sketches as they often tell a story of discovery, Corb's sketches for Villa Stein de Monzie show how radically the ideas changed from start to finish and also how closely his design related to Palladio's Villa Capra at Vicenza. The sketches allow us insight to his thinking process, something which one cannot see from the final product only. Do you keep your sketches at all? I was fascinated to see the plan sketch for Paradys for the first time.

Old blue Es, St Francis

14. I noticed something the other day while scanning your work, after you mentioned that the idea of "enclosure" is important to you. A lot of your residential buildings have a low wall wall that hugs a part of the site and becomes the building and often is the beginning of external spatial definition,



Barrie: Repeat glass in
mill stone,
Die Es: Rough to finer stone. Lateral and then
vertical compression & release on platforms - Sound

almost a grading of completely outside to partly enclosed and then the rest of the building grows from this. Mostly as an element that leads to the entrance too. It's evident in Keurbos to an extent with the central space with the ramp, definitely in die Es, muted in Bertie-Roberts as a "keermuur", as the garage element in Skaaprivier, very clear in Patterson, and Raynham, the entrance arm of Cape St Francis, Hermanus too as the yard wall, and certainly in Paradys. Perhaps I am reading too much into this! Is this something that is a Cape influence (the werf muur) or something else you feel is important to the idea of enclosure?

Prominently of a radial enclosure followed by release.
(Also refer Betty's Bay)

15. The roof, particularly the "moulded" roof occurs quite often in your work - Die Es, Raynham, Cape St Francis, Hermanus. Why is the continuous roof so important as opposed to the Cape tradition of singular separated roof forms? Plasticity

See the roof as an important plastic element supporting & explaining the plan, way of feel

16. On a similar tack, the Boland Farm Museum is quite a large continuous plan form as opposed to broken up nature of traditional Cape architecture. Its a much more sensuous and less classical approach, more contextual perhaps depending on the lie of the land etc. How and why this new take on the "vernacular"?

All elements should relate and enhance each other in far as possible, no making the yard wall part of the house (clearly seen at Hermanus) is an attempt to achieve this. See handrail at die Es enclosing the column, and aligning directly with door handle. (Door handle motif repeated in bedroom handles)

and sit no wall in rear handrail

that it is the plasticity and white wall surfaces that relate to our traditional architecture, rather than the separated & straight forms dictated by the typical wings of Cape Dutch homesteads.

The brief called for a Cape Dutch homestead, to be approached between outbuildings leaving the various tracks. This would have created a false impression, as built, was my proposal, as built, was for a large display complex, partially modern, with no attempt at the "vernacular".

* Awful addition
Refer original bldg.

impression and false attempt very little scope to demonstrate the various buildings full size displays

Tuesday 1 September 2009

17:00

1. Do you still own a yacht and may I visit it?
2. May I have a look through your book collection at a convenient time?
3. What did you actually study at UCT - mechanical or civil engineering – or was it a generic engineering course for the first two years?
4. Where were you born (at a hospital or at home)? Where were your parents living at the time?
5. Were there any teachers at Primary or High School that were influential?
6. What was the name of the outbuilding in which the plays were held at your Newlands house?
7. Can you please describe where exactly the house is that you grew up in?
8. Which employee(s) have you worked the closest with over the years (besides your wife)?
9. Danie Theron has recently referred (in Ora Joubert's 10 years and 100 buildings) to you using a "train plan" in your designs. Where does this attitude to planning come from?
10. Can you remember why there was a change in the design of Betty's Bay from a long plan to that of a centralized organization?
11. Why did you adopt such a "different" design approach at House Auldearn? It is different in the sense that it does not seem to follow many of the Cape vernacular principles that you used in other houses? It is certainly contextual but does not follow the general formal trends of almost all of your other projects?
12. Were there no domestic projects designed after your parent's house and before Bertie-Roberts in 1963?
13. Did you ever use Karel Jooste to design any of the Volkskas banks? I came across a bank in Kempton Park that was designed by him.
14. The double storey configuration seems to be a limited choice in most of your houses? Any particular reason for this?
15. Can you remember how DJ Levin made contact with you and asked you to design his house? Was he originally Cape Town based? Was the house in Saldanha a holiday house?
16. Can you remember what initiated the design response in House Blommaert in Stellenbosch? I noticed the view to Table Mountain through the living room on entry.
17. In my Chapter 7, I have discussed three types of roof typology that you have used over the years. Are there any particular influences that make you decide to use a mono-pitch, double pitch or barrel vault?
18. Was there no requirement for a garage at House Lückhoff?
19. House Patterson: why the "courtyard" layout? This house is one of the few that you have created that entirely borders its site.
20. Any comment on the distinction in plan forms that you use – they seem to vary from the completely orthogonal to a plan that twists and shifts such as Raynham.

21. What was the client's brief for Skaaprivierplaas? A new "farmhouse"? I came across an old house nearby that seems to be deserted. Was this perhaps the old farmhouse?
22. Houses Raynham and Neethling are quite similar in their roof form and organization. Any reason for this?
23. I have identified some patterns in your work. Do you try similar strategies to see how you can improve on them or are these merely subconscious "continuations"?
24. Is there any particular reason why both of the houses you have designed for yourself are the only ones that have bathrooms that are on the "view" face and not in the "service zone" of the building?
25. May I see the latest house in Langebaan that you have been designing?

Questions for Mr.Fagan 2010 06 24

1. What subjects did you study in the engineering course at UCT (1943-1946)?
2. Did you attend all of the classes or did you lose interest early on?
3. Can you remember any value from those courses that you used in later life?
4. Were they of any use in your architectural studies?
5. Was the Pretoria course years long (1946-1951)? Was there a practical year? If so where did you work?
6. Can you remember why the boat building as a child started?
7. When did you get married?
8. Can you please describe the transport modes in the photos below? Can you possibly date and locate them as well
9. Is your late brother Henry's wife still alive? Would she be amenable to an interview?

Questions for Mr. Fagan end April 2011

10. Where and how did you meet your wife?
11. When and where did you get married?
12. Where did you stay when you were at university in Pretoria?
13. Did you work for architects while at university?
14. Did you follow a full-time course?
15. Did you get the Adler in Cape Town and did you drive it up to Pretoria when you went to study there?
16. What is your understanding of the term "vernacular"? Do you regard it as different to the term "tradition".
17. Would you agree that your first experience of the power of the vernacular architecture of our country was when you flew on your trips and documented the buildings through photographs?
18. You once remarked that the Dutch learnt from the Portuguese in their use of technology. Can you elaborate?
19. Have you completed any new houses? You were working on something near '*Paradys*'.



INTERVIEWS WITH EMPLOYEES PAST AND PRESENT

YOUR CONTEXT

1. Where did you study?
2. When was this?
3. Any lecturers that made an impression on you?
4. How was design taught?

FAGAN CONNECTION

5. When did you first hear of Gawie Fagan?
6. Were you aware of his work, particularly his domestic work?
7. When did you work for him?
8. How did this come about?
9. What was your role in his office?

FAGAN HIMSELF

10. What was your working experience like?
11. Did you ever work closely enough with Fagan to understand how his design process works?
12. What was Fagan like as an employer?
13. What was he like out of the realm of the office environment?

14. What was the dynamic like between Fagan and his wife?
15. Did Fagan ever talk about architectural precedent, either local or international? If so, who did he mention?

YOUR IMPRESSIONS

16. What impact do you think did his interests like sailing and flying have on his architectural work?
17. What impact do you think did the conservation work have on his new architectural work, particularly his domestic architecture?
18. What is your understanding of the contribution that Fagan has made to South African architecture?
19. Do you think his domestic work can be described as unique?
20. It has been said by certain leftist architectural academics (e.g. Leon van Schaik) that using elements of a colonialist vocabulary to generate a new architectural response is not appropriate in terms of moving forward? How would you respond to this position?
21. Most of the houses that Fagan has designed are objects in the landscape and although contextually generated they are quite introverted and thus closely follow the Cape vernacular model. This is, in part, in opposition to architects such as Fox and Pahl that have used attributes of the Cape vernacular to generate a more extroverted architecture. Any comments on these distinctions?
22. There are definitely clear formal patterns that can be recognized in the design of Fagan's houses such as the bi-nuclear plan, sunken garages, stepped bedroom edges, roof as holding element etc. Do you think that he uses a "recipe" or is it a case of reworking ideas until they are perfected?

INTERVIEW WITH OWNERS

WHY FAGAN:

- Why did you choose Gawie as your architect?
- Had you seen anything else (at the time) that he had designed?
- Were you after a particular "style" of architecture?

THE START OF THE PROCESS

- Where did the first meeting between yourselves and Gawie take place?
- Can you remember where that was?
- Did you have a list of requirements/accommodation or was the brief quite open?
- Did you have specific requirements about materials that you wanted to be used?
- Did you already have the site or was Gawie involved in the choice?
- Did you meet him on site to discuss the possibilities?

THE DESIGN PROCESS

- When did this start?
- When did it end?
- How many ideas did Gawie present you with?
- Did he present ideas through drawings or models or both?
- Do any models still exist?
- Was the house always painted white? Whose decision was this?
- Who made the decision about the roof finish?



Was Gawie open to suggestions from you or was he quite sure about what should be done?
Was the fireplace 'room' a suggestion by Gawie or your request?

THE CONSTRUCTION PROCESS

When did this begin
How long did it take?
How was the builder chosen?
Was it a difficult process?
Did he respond well to the constructional requirements?

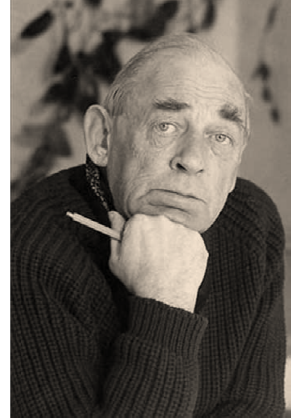
THE LIVED EXPERIENCE

Does the house live up to your expectations?
How does it respond climatically? Is it cool in summer and warm in winter?
Do the spaces function well?

13.10 APPENDIX J

PRÉCISED BIOGRAPHIES OF IMPORTANT PERSONALITIES RELATED TO THE STUDY

AALTO, Hugo Alvar Henrik (1898-1976) was a Finnish architect who developed an organic modern architectural style in contrast to the homotopic formality of the CIAM grouping of 1928 (Porphyrios, 1982, St. John Wilson, 2007 and Pelkonen, 2009).



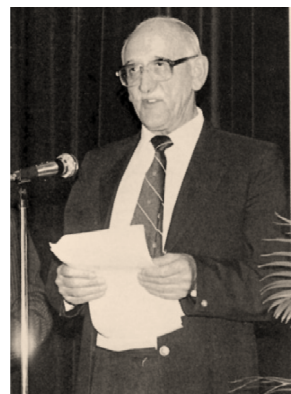
<http://mit81.com/baker/content/alvar-aalto> [Accessed: 12/04/2012].

BAKER, Sir Herbert John (1862-1946) was born in Kent in England and was articled to various English practices. He came to South Africa in 1892 and completed alterations to, amongst others, Cecil John Rhodes's house (later Groote Schuur). He is most famous for the Union Buildings in Pretoria, completed for the Union of South Africa in 1910, in which he displayed a regionalist Classicist sensibility, particularly in the use of materials (Keath, 1994 and Greig, 1970).



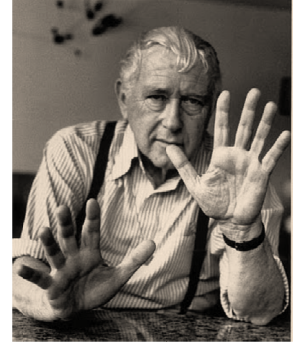
http://ookaboo.com/o/pictures/topic/2560193/Herbert_Baker [Accessed: 11/04/2012].

BIERMANN, Barrie (1924-1991) graduated as an architect from the University of Cape Town in 1948, receiving the first Helen Gardner Memorial Prize and undertaking a tour of study in Brazil in 1949. He was a long time member of the staff of the Department of Architecture at the University of Natal, advocating a regional approach to design. He travelled to Brazil in his youth and displayed an affinity for the Cape Dutch style, which he researched and wrote on extensively. He also developed a fascination with African architecture through his travels. (<http://www.artefacts.co.za/main/Buildings/archframes.php?archid=2151&countadd=1> [Accessed: 10/04/2012 07:41]). Biermann encouraged Fagan to pursue a study on *brakdakke* (flat roofed buildings) in the Karoo region of South Africa (Fagan, G.T. and G.E., 2009).



Barnett, 1992:1.

BREUER, Marcel (1902-1981) was born in Hungary and studied at the Bauhaus from 1920 to 1928. During this time he became master of the carpentry shop honing his furniture making skills. Thereafter he practiced architecture in Berlin for three years and later spent two years in England before he left for the United States of America in 1937. He taught architecture at Harvard at the invitation of Walter Gropius with whom he also practiced in Cambridge, Massachusetts (Breuer and Blake, 1955). His architecture is characterised by Modern Movement forms and attenuated spatial organizations that are tempered by contextual influences. Breuer softens the Modern Movement material palette with stone and timber. There are many similarities to Fagan's approach in the way that Breuer has mediated Modern Movement influences in a new context.



<http://centralbranchlibrary.blogspot.com> [Accessed: 16/04/2012].

COLE BOWEN, Robert Edward (Coley) (1915-1952) was born in Winburg in the then Orange River Colony. He started his architectural studies at the Department of Architecture at the University of the Witwatersrand in 1923, but due to family commitments left and later attended part-time classes in Pretoria, registering as an architect in 1928. He ran a private practice from 1945 to 1953 and was also an influential senior lecturer at the University of Pretoria when Fagan studied there



(<http://www.artefacts.co.za/main/Buildings/archframes.php?archid=157&countadd=1> [Accessed: 19/07/2008. 09:44]).

<http://www.artefacts.co.za/main/Buildings/archframes.php?archid=157&countadd=1> [Accessed: 10/04/2012].

CONNELL, Paul. OBITUARY (1915-1997) was appointed the first Professor of Architecture at the University of Natal in Durban in 1949, one of the youngest professors ever to be appointed to the University, aged only 34. He was born in York, England. He studied architecture at the University of the Witwatersrand, was a student member of Martienssen's Transvaal Group and served as its secretary at the time of inviting Le Corbusier to the Town Planning Congress of 1938, the year Connell. After joining the staff at UCT, he was appointed a founder member and first Head of the Architectural Division of the National Building Research Institute of the CSIR in Pretoria. Under his tenure the Natal School of Architecture established the degree course in Architecture which then became recognised by ISAA, RIBA and ARCUK. Subsequent to a Carnegie sponsored tour to USA, Connell invited to Natal, Buckminster Fuller, who in 1958 together with students, carried out a geodesic research project inspired by the indigenous Zulu indlu or beehive hut. Connell relinquished the Chair of Architecture in 1964 to take up the post of Planning and Development Officer to the University of Natal, and subsequently at Technikon Natal. Paul Connell was a gentleman, highly intelligent yet self effacing. Because of his religious

convictions, his later years were extremely private. (Croft, 1997:1)

COSTA, Lúcio (1902-1998) was a Brazilian architect who influenced the work of Oscar Niemeyer. He was responsible for the development of a plan for Brasilia in 1957 (Frampton, 1996:182) and the development of a Modern Movement architecture in Brazil. He worked with Le Corbusier on the Ministry of Education building in Rio de Janeiro in 1936 (Frampton, 1996:254).



http://www.starbacks.ca/~augusto_areal/builders_of_brasilia.htm [Accessed: 12/04/2012].

COWIN, Douglas Maurice (1911-?) was born in Pretoria, South Africa and received his architectural education in Liverpool, England. He formed a practice in Johannesburg with Ernest Powers (1877-1956) and Thomas Ellis (1887-1940) and adopted a contrary attitude to the architecture of the Martienssen group, opting for more regional and climatically appropriate solutions (<http://www.artefacts.co.za/main/Buildings/archframes.php?archid=317&countadd=1> [Accessed: 10/04/2012 19:49]).

EATON, Norman Musgrave (1902-1966) was born in Durbanville in the Cape, trained at the University of the Witwatersrand, apprenticed with Gordon Leith and caught the eye of Herbert Baker who nominated him for membership of the Royal Institute of British Architects (RIBA). Eaton displayed a sensitivity for context and the materiality and detailing of African architecture, while the Cape vernacular greatly influenced his work. (<http://www.artefacts.co.za/main/Buildings/archframes.php?archid=450&countadd=1> [Accessed: 19/07/2008 09:41 and Harrop-Allin, 1975]).



<http://www.artefacts.co.za/main/Buildings/archframes.php?archid=450&countadd=0> [Accessed: 12/04/2012].

FASSLER, John (1910-1971) was a student, lecturer and eventually professor of architecture at the University of the Witwatersrand (Wits), succeeding prof. Geoffrey Pearse in 1948. He assisted Pearse with drawings for the seminal work *Eighteenth century architecture in South Africa* and designed the John Moffat architecture department building on the Wits campus in the 1950s (<http://www.artefacts.co.za/main/Buildings/archframes.php?archid=493&countadd=1> [Accessed: 10/04/2012 19: 57]).

FOX, Revel Albert Ellis (1924-2004) was educated at the University of Cape Town and was influenced by his Scandinavian work experience and restoration projects undertaken in the Cape (Fox, 1998). His seminal domestic work of the 1950s and 60s brought together these two influences in a unique albeit restricted architectural manner. Fox's descriptive text *Reflections on the making of space* was published following the exhibition of his work at the Sophia Gray Memorial Lecture of 1997. This lecture series was instituted by the Department of Architecture at the University of the Orange Free State and is probably the best example of public exhibition of the body of an architect's work. It has, unfortunately, resulted in only one publication.



<http://www.artefacts.co.za/main/Buildings/archframes.php?archid=2140> [Accessed :11/04/2012].

"FURNER, Stanley (1892-1971) trained in Britain at the Architectural Association and studied at the Slade School for a year. After the 1914-18 war he lectured at the Bartlett School for three years, becoming acutely aware of the new architectural developments of the time. In 1925 he came as a lecturer to the Witwatersrand School of Architecture, leaving in 1929 to become a partner in the practice of Kallenbach and Kennedy. Pursuing modern architecture with conviction, he was greatly impressed by Frank Lloyd Wright, Otto Wagner and Le Corbusier, whose early works were just appearing. Furner's first works adhered to a stylized classicism, but he soon moved away from classical forms and motifs. The Plaza Cinema [in Johannesburg] is probably the first significant modern building in South Africa. Though essentially modern, it retains residual classicism in its general proportions, its vertical fins like a giant order, and in its cornice. This building stands between classicism and uncompromising modernity; it heralds the new, yet nostalgically clings to the old" (Cooke, B.S., 1985a). (Furner and wife Mollie taken outside Meikleour, Dorking, Surrey which was the family home of James Gibson, father of Mollie.



<http://www.artefacts.co.za/main/Buildings/archframes.php?archid=553&countadd=1> [Accessed: 10/04/2012].

(<http://www.artefacts.co.za/main/Buildings/archframes.php?archid=553&countadd=1> [Accessed: 10/04/2012 20:20]).

GRAY, Eileen (1878-1976) was an Irish born designer and architect who completed most of her work in France. She synthesised a contextual sensitivity and the "pure, minimal lines of Modern Movement aesthetics with a sense of comfort, practicality and wit" (Constant, 2007).

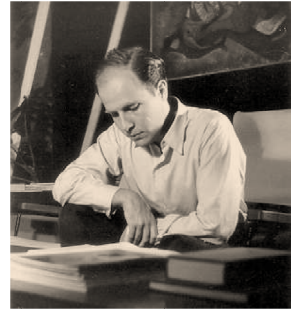


(Constant, 2007).

GREIG, Doreen (1943-) became the first woman President-in-Chief of the Institute of Architects in 1971 (<http://ancestry24.com/status-of-women-in-south->

africa/ Accessed: 11/04/2012 10:58). She has written extensively on South African Architecture, particularly on the work of Sir Herbert Baker.

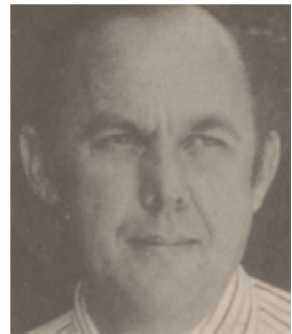
GUEDES, Amancio d'Alpoim Miranda (Pancho) (1925-) was born in Lisbon, Portugal and received his architectural education at the University of the Witwatersrand and the Escolas das Belas Artes in Porto, Portugal. He practiced mainly in Maputo, Mozambique before becoming the chair of architecture at the University of the Witwatersrand. His architecture is a synergy between the orthodoxy of the Modern Movement, the organic traditions of his native Portugal, and his artistic and sculptural pursuits (Guedes *et al*, 2009).



<http://www.guedes.info/abcontfram.htm> [Accessed: 10/04/2011].

HALLEN, Hans Heyerdahl (1930-) was born in South Africa of Norwegian parents. He studied at the University of Natal, in London and in Rome. He later taught at the University of Natal and practiced with Danie Theron (ex head of the School of Architecture at the Nelson Mandela Metropolitan University in Port Elizabeth, South Africa). The work of the practice, Hallen Theron and Partners, attempted to relate the forms and structures of buildings to site, social context, and appropriate construction method.

(<http://www.artefacts.co.za/main/Buildings/archframes.php?archid=1971&countadd=1> [Accessed: 11/04/2012 11:25]). The firm often produced a regionally inflected white-walled architecture reminiscent of the Cape vernacular and were influenced by the teachings of Barrie Biermann. Hallen now resides in Australia.



<http://www.artefacts.co.za/main/Buildings/archframes.php?archid=1971&countadd=1> [Accessed: 10/04/2012].

HANSON, Norman. (1909-1991). "Studied at the University of the Witwatersrand (1926-31), his dissertation inspired by Constructivism. Opened Hanson, Tomkin and Finkelstein (1932); was central in the emergence of the Transvaal's International Style. Practised until 1963. Professor at Manchester (1963-71). Gropius and Mies influenced his earliest work; in this building Le Corbusier dominates. It has the typical vertical organization of a freely planned ground floor with piloti, several storeys of flats and an extensive solarium. The alternation of deep balconies with glazed porches is reminiscent of Corb's Immeuble Villa. The flats have curving walls and retain the spatial virtuosity of the facade. They are planned with great care, revealing Hanson's programmatic intention to provide real amenity for multi-storey living, with generous balconies and sleeping porches outside bedrooms. After World War II, his work changed to a weightier, intricately detailed, classicist mode which he saw as more rational and socially acceptable" (Cooke, J. 1985).

HÄRING, Hugo (1882-1958) was a German architect who initially shared offices with Mies van der Rohe in Berlin. He (and later Hans Scharoun) "believed in the ultimate primacy of function ... he sought to transcend the primitive nature of mere utility by evolving forms from a more profound understanding of the program ... however, his attitude to massing was often naively imitative of biological form (Frampton, 1996:122). Häring was one of the architects that St. John Wilson (2007) refers to as deferring from the direction of the 1928 CIAM congress.



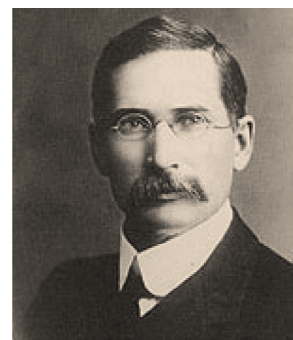
<http://www.architetturaorganica.org/architetturaorganica/ARCHITETTURA/EUROPA/HugoHarin gllmondononeancoratuttofinito.htm> [Accessed:12/04/2012].

HEIDEGGER, Martin (1889-1976) was a German philosopher whose work concentrated on ideas of conscious experience to understand our state of being. His most famous architecturally related treatise was entitled *Dwelling, Thinking and Building* and was published in 1951. His "work is perhaps most readily associated with phenomenology and existentialism, although his thinking should be identified as part of such philosophical movements only with extreme care and qualification. His ideas have exerted a seminal influence on the development of contemporary European philosophy. They have also had an impact far beyond philosophy, for example in architectural theory" (<http://plato.stanford.edu/entries/heidegger/>. Accessed: 12/04/2012 12:55).



<http://www.philosophypages.com/ph/heid.htm> [Accessed: 12/04/2012].

HERZOG, James Barry Munnik (1866-1942), a trained lawyer, was Prime Minister of the Union of South Africa from 1924-1939 and leader of the United Party 1934-1939 (Muller, 1984). In 1938 Fagan's father became minister for Native Affairs in Herzog's cabinet.



<http://www.sahistory.org.za/people/james-barry-munnik-hertzog> [Accessed: 12/04/2012].

HILBERSEIMER, Ludwig (1885-1967) was a German architect/planner most closely associated with the architectural programme at the Bauhaus (Frampton, 1996:129). Hilberseimer taught at the Bauhaus Dessau from spring 1929 to April 1933. He began his teaching activities at the Bauhaus as the head of building theory and taught the building design course. He later became the teacher of the seminar for residential building and urban development (<http://bauhaus-online.de/en/atlas/personen/ludwig-hilberseimer>. Accessed: 12/04/2012 13:02). Pius Pahl was instructed by both Hilberseimer and Mies van der Rohe.



<http://bauhaus-online.de/en/atlas/personen/ludwig-hilberseimer> [Accessed: 12/04/2012].

HOWIE, W. Duncan. Started studies in 1930 at Wits, worked for Hanson, Tomkin & Finkelstein in 1934 (his 4th year of study), where he prepared drawings for the Brookstone pool, and worked on College Mansions (1934) and Hotpoint House, especially the detailing. Graduated in March 1936 with the Degree of Bachelor of Architecture – with distinction. Appointed Junior Lecturer at Witwatersrand University School of Architecture in 1936. He also taught part-time at the Pretoria School of Architecture. At Wits he moved up through the ranks, to Lecturer, Senior Lecturer, Associate Professor, and – after the retirement of John FASSLER – he was promoted to full Professor and Head of the School (<http://www.artefacts.co.za/main/Buildings/archframes.php?archid=2039&countadd=1> [Accessed: 11/04/2012 11:35]).

JACOBSEN, Arne (1902-1971) was born in Copenhagen, Denmark. An initial Classical training at the Royal Danish Academy of Fine Arts was tempered by visits to Le Corbusier's l'Esprit and Melnikov pavilions, and the discovery of Mies van der Rohe and Walter Gropius's work on a visit to Berlin. These influences eventually developed into a Nordic functionalism – architecture sensitive to place and the needs of modern man (De Corral, 1955:13).



<http://eggchair.eu/egg-chair-history> [Accessed: 12/04/2012].

JAPHA, Derek and Vivienne. The Japhas were both lecturers in the Department of Architecture at the University of Cape Town in the 1980s and early 1990s. Vivienne became only the second woman president of the South African Institute of Architects and died in an unfortunate accident while performing duties for that organization in China in 1999. Her husband became Deputy Dean of the faculty of Engineering and the Built Environment at the University of Cape Town. A large part of their work, together with Fabio Todeschini, focused on

research, practice and policy related to the conservation and development of built heritage

(<http://www.artefacts.co.za/main/Buildings/archframes.php?archid=3023&countadd=1> [Accessed: 11/04/2012 17:47]).

JOHNSON, Philip (1906-2005) and HITCHCOCK, Henry-Russell (1903-1987) compiled a book to record the International Exhibition of Modern Architecture, held at the Museum of Modern Art in New York in 1932. The exhibition concentrated on stylistic commonalities between Modern Movement architectures in different parts of the world (Hitchcock & Johnson, 1932).



Philip Johnson.

http://www.encyclopedia.com/topic/Philip_Cortelyou_Johnson.aspx [Accessed: 12/04/012].

JOOSTE, Karl J. (Karel) (1925-1971) was a University of Pretoria graduate and contemporary and lifelong friend of Fagan's. As a student he worked for Norman Eaton and after qualifying with Philip Nel. His most famous building is the Aula at the University of Pretoria and his architecture was a mature synergy of Modern Movement and Brazil Builds influences and the context and materiality of the Pretoria region (Jooste, 2008).

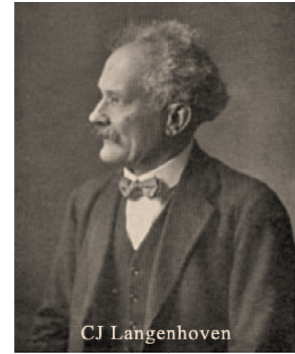


(Photo courtesy of Johan Jooste Architect, 2012).

KANTOROWICH, Roy (1916-?) was born in Johannesburg and educated at King Edward VII school, Johannesburg. He studied architecture at the University of the Witwatersrand from 1934 until 1938. He spent twelve months working in the office of A.J. Stewart (1937-1938) and two months in D.M. SINCLAIR's office, graduating in 1938. As a fourth-year student, working in Stewart's office, Kantorowich designed the Halfway House Hotel, on the old Johannesburg-Pretoria road. In 1939 he received a postgraduate scholarship to continue his studies for a further two years and appears to have gone to America for a time (<http://www.artefacts.co.za/main/Buildings/archframes.php?archid=870&countadd=1> [Accessed: 11/04/2012 11:49]).

LANGENHOVEN, Cornelis Jacobus (1873-1932) is best remembered for his penning of the pre-democracy South African anthem "Die Stem" (The Call). He was a fierce proponent of the Afrikaans language and one of the youngest protagonists of Afrikaans culture and writing

(http://www.andiquote.co.za/outeurs/CJ_Langenhoven.html [Accessed: 10/04/2012 18:31])



<http://www.cjlangenhoven.co.za/gedenklesing.php> [Accessed: 10/04/2012].

LEITH, George Esselmont Gordon (1886-1965) worked for Sir Herbert Baker and is regarded by Eaton as the link between Classical and Modern architectures in South Africa. Born in South Africa, he trained at London's Architectural Association. As the first recipient of the Herbert Baker Scholarship, he spent two years at the British School in Rome where his studies of the Flavian Palace earned international interest. He lectured at the A.A. School and later assisted Baker in his design of the Union Buildings. In 1920 he started his own practice. Prototypes for his early buildings were the palazzi of Verona and the thermae of ancient Rome (Cooke, B.S. 1985b).



<http://www.artefacts.co.za/main/Buildings/archframes.php?archid=963&countadd=1> [Accessed: 10/04/2012].

LE ROITH, Harold Hearsh (1906-?) was born in Grahamstown and was educated at the Victoria High School. He studied architecture and art from 1928 to 1929 at Rhodes University in the Cape, a course of a year's duration then offered by this university. Le Roith then left to study architecture at the University of the Witwatersrand, graduating with the Degree of Bachelor of Architecture in March 1935. Le Roith stated (1989) that while he was at the school of architecture he was influenced by Rex Martienssen for whom he had great respect as an inspiring teacher. As a result of this influence Le Roith's interest in Le Corbusier was stimulated, contributing to the designs of his buildings. Le Roith would often consult with engineers and this also had bearing on his work (<http://www.artefacts.co.za/main/Buildings/archframes.php?archid=967&countadd=1> [Accessed: 11/04/2012 12:00])

LEWCOCK, Ronald B. Ph.D., Professor of Architecture, Georgia Institute of Technology, Atlanta, USA. Lewcock is a distinguished international architect and academic, is an authority on the conservation of buildings and on the urban rehabilitation of historic cities, as well as the history and theory of architecture in ancient and modern western, non-western and Islamic cultures. He currently holds the title of Distinguished Professor in the Doctoral Program at Georgia Institute of Technology, in Atlanta, USA, and has served as the Aga Khan Professor of Architecture and Design for Islamic Cultures at the Massachusetts Institute of Technology. Originally a South African, he founded an international architecture practice in Durban in 1953, but moved his practice to Cambridge, UK, in 1970. He received a Ph.D. from the University of Cape Town in South Africa; an M.A. from Cambridge University, and has recently received an Honorary D. Arch. from Natal University in South Africa. His research includes Islamic architecture & urbanism, African sub-tropical architecture, South Asian architecture, Western & colonial architecture, and contemporary architecture in the Islamic World and in Australia (<http://www.artefacts.co.za/main/Buildings/archframes.php?archid=2102&countadd=1> [Accessed: 11/04/2012 11:40]).



<http://www.uq.edu.au/atch/prof-ronald-lewcock> [Accessed: 12/04/2012].

MALAN, D.F. (1874-1959) was born in Riebeeck-Wes in the Cape and educated as a minister in the Dutch Reformed Church. He was the leader of the National Party in the Cape. From 1924 to 1933 he was Minister of the Interior, Education and Public Health. After defeating Smuts and the United Party in 1948 he became Prime Minister and laid the foundation for the policy of Apartheid (Muller, 1984).



http://en.wikipedia.org/wiki/Daniel_Fran%C3%A7ois_Malan [Accessed: 16/04/2012].

MARTIENSSEN, Rex Distin (1905-1942) graduated at the University of the Witwatersrand, eventually becoming an influential lecturer. He visited and communicated with Le Corbusier and attempted to pioneer a Modern Movement architectural direction in South Africa with various publications, including *zero hour* (sic) in 1933 (Herbert, 1975).



Herbert, 1975.

MCINTOSH, Gordon, W. (1904-1983) trained at the University of the Witwatersrand (1923-28), becoming the second graduate of the school. He opened a practice in 1930. With Martienssen and Hanson, he was central in Transvaal's International Style movement, and is attributed with its first building,

House Munro (1932) (Cooke, J., 1985).

MEINTJIES, Clyde (1936-) was born in Pretoria and obtained his Diploma in Architecture at the University of Pretoria (UP) in 1960. As a student he worked for Gordon McIntosh from 1955-1959. He then joined Volkskas Architects where Gawie Fagan was chief architect, remaining there till 1961. He then worked in Aden from May 1961 to May 1963 and later in the UK, returning to South Africa in 1967. In Cape Town he joined Gawie Fagan from 1967-1969. He then returned to Pretoria to work for Eric Todd, Austin & Sandilands on the Jan Smuts Airport building. Thereafter came a brief stint in private practice from 1970-1971, also in association with Gordon McIntosh. In July 1971 he joined the Department of Architecture at UP. In 1984 he joined the staff of the Landscape Architecture Department at UP, remaining there until his retirement in 1996 (<http://www.artefacts.co.za/main/Buildings/archframes.php?archid=3279&countadd=1> [Accessed: 18/10/2011 06:05]).



Meintjies, 2012.

MEIRING, Adriaan Louw (Professor) (1904-1979). First professor of Architecture at Pretoria University in 1943. He was born in Johannesburg; the family soon moved to Paarl in the Cape where Meiring was educated. He studied Philosophy and Languages at the University of Cape Town, graduating in 1924, and shortly afterwards turned to architecture. In 1926 he became a junior in the offices of Louw & Louw in Paarl before transferring to their Cape Town office in 1927. According to his Associate nomination papers (1933/34), he attended the Liverpool School of Architecture from October 1929 until July 1933. By 1934 he had returned to Cape Town and was working in the same office (Louw & Louw) as David Naudé; the offices were at 501 Sanlam Building in Cape Town. In 1938 the two entered into a partnership which continued until at least 1960. In 1943 he accepted the appointment to the new Chair of Architecture at Pretoria University, thus becoming the first professor of Architecture at the University. He subsequently designed a number of buildings for the campus of the University of Pretoria, including the Dental School, several undertaken in association with C.S. Lodge of Burg, Lodge & Burg. Meiring undertook pioneer studies of Ndebele building on which he published articles. He was instrumental in establishing one of the early outdoor museums on Ndebele culture and made significant contributions in the field of acoustics, in which he was keenly interested. He retired in 1968 (<http://www.artefacts.co.za/main/Buildings/archframes.php?archid=2364&countadd=1> [Accessed: 11/04/2012 12:41]).



Du Toit Spies & Heydenrych, 1987:68.

MEYER, Hannes (1889-1954) was a Swiss architect and director of the Bauhaus from 1928-30. He was "suspicious of the poetic utopianism of men like Le Corbusier ... and deliberately accentuated the factory aesthetic in his designs" (Curtis, 1996:263).



<http://bauhaus-online.de/en/atlas/personen/hannes-meyer> [Accessed: 12/04/2012].

MUNNIK, Mike (1930-2005). As architect and conservationist, and partner in the firm of Munnik, Visser, Black and Fish, his contribution on the professional front was substantial. He was involved in the design and construction of numerous buildings and developments of note, several of which received awards - such as the Library of the University of the Western Cape (with Julian Elliot) - ISAA Award of Excellence, the Simonstown Waterfront - ISAA Conservation Award, the Robert Leslie Building at the University of Cape Town - ISAA Award of Merit and the Anglican Cathedral in Gaborone (with Pippa Vincent). In his profession he served for many years at a provincial and national level, being elected President of the Cape Provincial Institute of Architects (1970-1971) and President-in-Chief of the Institute of South African Architects (1971-1972). One of his major contributions in these roles was the development and adoption of the Architects Act of 1970. He taught at the University of Cape Town and acted as external examiner there and at other institutions. He was also a talented watercolourist. In recognition of his contribution as architect and member of the profession, he received the Medal of Distinction of the SAIA in July 2005 (<http://www.artefacts.co.za/main/Buildings/archframes.php?archid=2782&countadd=1> [Accessed: 11/04/2012 12:46]).

MIKULA, Paul completed his studies at the University of Natal in 1967. He formed the Building Design Group together with John Edgar, Brian Kearney and Brian Lee. The group were instrumental in fostering a contextual approach to architecture (Sanders, 2005b). Paul Mikula was the Sophia Gray Laureate in 2004 (<http://www.artefacts.co.za/main/Buildings/archframes.php?archid=2748&countadd=1> [Accessed: 11/04/2012 12:48]).



http://www.architectafrica.com/bin0/news20041027_mikula_interview.html [Accessed: 12/10/2008].

MOERDIJK, Gerard Leendert (1890-1958) was born in the Waterberg district two years after his father emigrated from the Netherlands. After leaving school he worked at the Department of Public Works (DOW) and in 1909 he left to study architecture at the A.A. Study trips to the Ecôle des Beaux Arts and British School of Archaeology in Rome followed. After returning to the DOW in 1917 he formed his own practice which moved from Johannesburg to Pretoria in 1924. He established a new direction in South African church architecture, opting for a more centralised organization. He was a staunch supporter of the culture of the Afrikaner and was best known for his design of the 1938 Voortrekker Monument (my translation from Fisher & Le Roux, 1989:123).



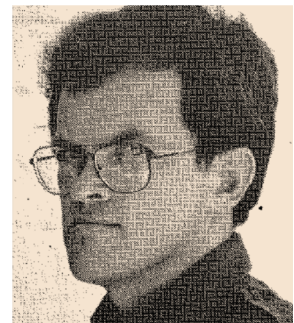
<http://www.artefacts.co.za/main/Buildings/archframes.php?arcid=1102&countadd=1>
[Accessed: 10/04/2012].

MUMFORD, Lewis (1895-1990) was an American writer who served as an architectural critic for the New Yorker for over 30 years. He wrote seminal works on urban issues as well as the influence of technology on society and architecture. "Lewis Mumford sought to tease out the inextricable linkage he felt lay between architectural forms and social forces. He also sought to restate his concept of architectural regionalism – a synthesis of the universal/classical and regional/romantic tendencies in architecture" (Canizaro, 2007:95).



<http://www.nd.edu/~ehalton/mumfordbio.html> [Accessed: 12/04/2012].

MURRAY, Keith (1946-) was born and raised in Harare, Zimbabwe and trained at the University of Cape Town. After a visit to the East returned to work for Architects Design Group in Harare, Zimbabwe in the 1980s. (Anon, 1985a:69). He taught at the University of Cape Town in the early 2000s and later emigrated to the United Kingdom.



UIA International Architect (8), 69.

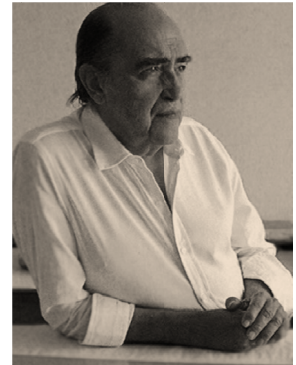
NAUDÉ, Adèle (1938-) and SANTOS, Antonio de Souza are South African and Mozambican born architects respectively who produced a contextually and Corbusian inspired domestic architecture in the Cape Town area during the late 1960s and early 1970s. A recent monograph (Wolff, 2012) documents their seminal work.



Adele -
<http://web.mit.edu/fnl/volume/>

192/santos.html [Accessed:
12/04/2012]. Tony - by author,
February 2012.

NIEMEYER, Oscar Ribeiro de Almeida Soares Filho (1907-) is a Brazilian architect who created his own unique brand of International Modernism. His Ministry of Education building (initially together with Costa and Le Corbusier) of 1943 served as inspiration for the development of a 'little Brazil' in Pretoria in the late 1940s and early 1950s. Frampton notes (1996:254) that "Niemeyer brought Le Corbusier's concept of the free plan to a new level of fluidity and interpenetration".



http://www.askmen.com/celebs/men/business_politics/oscar-niemeyer/index.html
[Accessed: 12/04/2012].

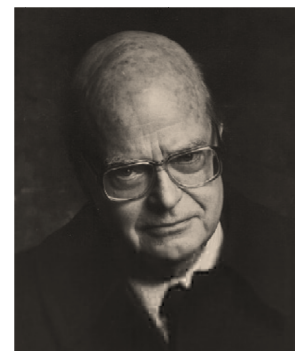
NOERO, Jo graduated from the University of Natal in 1978. He has taught both nationally and internationally, was Head of the School of Architecture at the University of Cape Town from 2000 to 2005 and has received many prizes including the RIBA international prize in 2006.

(http://www.onsetimages.com/english/project/tourism/SentinelExperience/Khoisan_Biography/bio_Jo%20Noero.htm [Accessed: 11/04/2012 16:51]). In 2009 he published a book on his work entitled *The everyday and the extraordinary. Three decades of architecture: Jo Noero Architects 1982-1998 and Noero Wolff Architects 1998-2009*.



http://www.e-architect.co.uk/awards/world_architecture_festival_awards.htm
[Accessed: 12/04/2012].

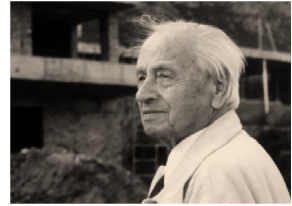
NORBERG-SCHULZ, Christian (1926-2000) was a Norwegian architect who brought Heidegger's ideas on phenomenology to the world of architecture through his publications on the relationship between man and his environment and internal space. Heynen (1999:18) has identified that his interpretations of Heidegger's texts were "utopian and nostalgic" and that his formal interpretations were informed by classical and Mediterranean examples.



<http://www.aho.no/en/aho/news-and-events/calendar/2009/book-launch-an-eye-for-place/>

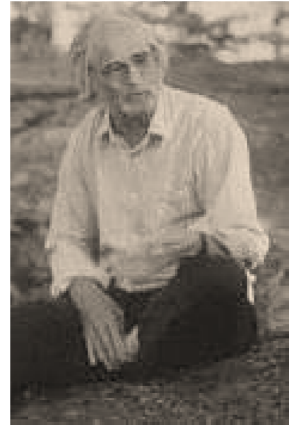
[Accessed: 12/04/2012].

PAHL, Pius Edmund (1909-2003) was trained in Germany at the Bauhaus until its closure in 1933. He practiced in Germany till his emigration to South Africa in 1952, where he established himself in Cape Town working mainly in the Stellenbosch area. His houses display a rationalist bias and a limited spatiality but bear strong regionalist leanings in their siting and physical connection. (Kench, J. 1988).



http://www.artthrob.co.za/02feb/listings_cape.html [Accessed 12/04/2012].

PALLASMAA, Juhani (1936-) is a Finnish architect who, as an academic, was head of the University of Helsinki. He was also a director of the Museum of Finnish Architecture. He has written extensively on the haptic aspects of architecture, arguing for a return to the use of all the senses in defining architecture.



<http://www.uiah.fi/studies/history2/pallas.htm> [Accessed: 12/04/2012].

PEARSE, Prof. Geoffrey (1885-1968) of the Department of Architecture at the University of the Witwatersrand coined the term Baker School to describe those architects who had worked in the office of Herbert Baker or the Department of Public Works in the Transvaal and Free State after the Anglo-Boer War of 1899-1902. Born in Natal. "Trained by pupillage in London, with no formal instruction; worked for Baker, and after winning some competitions started practice in 1913 which was interrupted by war service. In 1921 was made professor and developed the new Witwatersrand University School of Architecture. During the 30s, Pearse - a classicist - with great breadth of mind, enabled the Modern Movement in South Africa to be born in his school" (Cooke, B.S., 1985c:59).



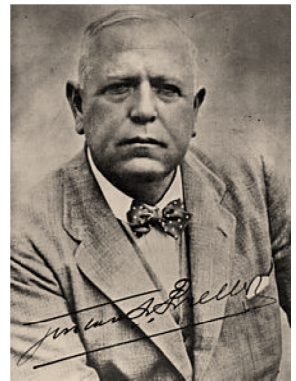
http://repository.up.ac.za/bitstream/handle/2263/10457/ar001mis_pear.0034.jpg?sequence=1 [Accessed 07/05/2012].

PIERNEEF, Jacobus Hendrik (1886-1957) was the son of a builder from the Netherlands. He matriculated in Pretoria but returned with his family to the Netherlands to attend drawing classes and study at the Academy for Fine Arts in Rotterdam but due to financial restraints could not complete his studies. He returned to South Africa and continued with drawing studies under Gordon Leith. A great influence on his paintings was the Namibian landscape and indigenous culture of the Bushmen (Fisher & Le Roux, 1989:125).



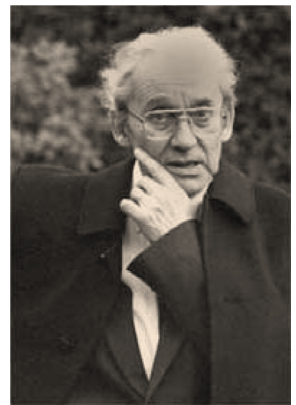
<http://www.boereafrikana.com/Mense/Kunstenaars/Pierneef/Pierneef.htm> [Accessed: 12/04/2012].

PRELLER, Gustav (1875-1943) championed Afrikaner culture and became a literary critic of great significance. He worked as editor of *Die Brandwag* and produced some history books, including a biography entitled *Piet Retief* that eventually expanded into ten editions (<http://www.sahistory.org.za/people/gustav-preller> [Accessed: 11/04/2012 19:43]).



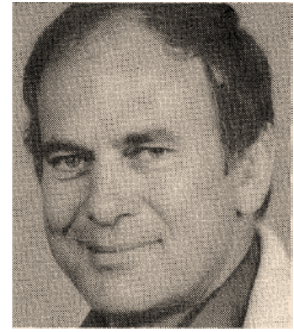
http://en.wikipedia.org/wiki/Gustav_Preller [Accessed:11/04/2012].

RICOUER, Paul (1913-2005) was a French philosopher who synthesised ideas on phenomenology with that of hermeneutics. His seminal essay "Universal Civilization and National Cultures" of 1961 highlighted the polarities of scientific advancement and the subsequent destruction of local traditions. This article provided the impetus for Frampton's argument for the development of a 'critical regionalism' (Frampton, 1996:314).



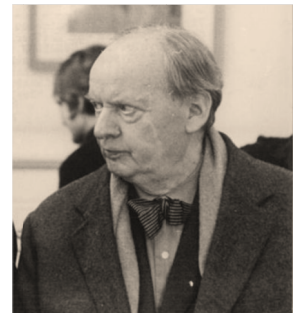
http://en.wikipedia.org/wiki/Paul_Ric%C5%93ur [Accessed 11/04/2012].

RUSHMERE, John (1939-) was born in Port Elizabeth, trained at the University of Cape Town and worked in Johannesburg with Glen Gallagher and Willie Meyer, after they had trained under Rudolph and Kahn (Anon, 1985b:68). He was the head of design at the Nelson Mandela Metropolitan University's Department of Architecture after the retirement of Danie Theron. He was a recipient of the ISAA Gold Medal and Award for Excellence in 2002 (<http://architecture.nmmu.ac.za/Staff>. Accessed: 12/04/2012 14:06).



UIA International Architect (8), 68.

SCHAROUN, Hans (1893-1972) was a German architect who developed the organic architectural approach of his mentor Hugo Häring (Blundell Jones, 1995). Scharoun's pedigree included the more extreme forms of Expressionism, and in the 1920s and 1930s he had rebelled against the strictures of the International Style, evolving a personal manner of his own which relied upon angular or curved geometries, emphatic cantilevering and the concatenation of different structural systems in a single design (Curtis, 1996:473).



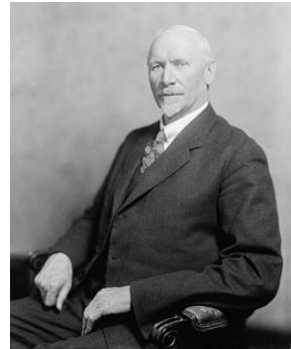
http://en.wikipedia.org/wiki/File:Bundesarchiv_Bild_183-E0324-0047-004,_Berlin,_Otto_Nagel-Ausstellung,_Scharoun.jpg [Accessed and amended: 12/04/2012].

SIZA, Álvaro Joaquim de Melo Vieira (1933-) is a Portuguese architect who was awarded the Pritzker Prize for Architecture in 1992. He created a unique synthesis of the traditional architecture of his country and European modernism. He has taken "Aalto as his point of departure [and has] grounded his buildings in the configuration of a specific topography and in the fine-grained texture of the local fabric" (Frampton, 1992b:317).



<http://www.builderasia.com/alvaro-siza/> [Accessed: 12/04/2012].

SMUTS, Jan Christiaan (1870-1950) was born in Malmesbury in the Cape. He studied at Stellenbosch and Cambridge universities eventually qualifying as a lawyer. He was Prime Minister of the Union of South Africa from 1919 until 1924 and from 1939 until 1948. He served in both World Wars and was highly regarded by the British government serving as one of five members of their war cabinet. He was instrumental in forming the League of Nations (Muller, 1984).



http://en.wikipedia.org/wiki/Jan_smuts [Accessed: 16/04/2012].

SOUTH, Basil Hugh (1925-1952) was born in Mafikeng, was trained at the Wits School of Architecture and taught at the University of Pretoria during Fagan's studies (Steenkamp, 2003:5). He was well respected as a teacher but unfortunately died at a young age of tick-bite fever. Fagan later bought his farm at Kameeldrift in Pretoria.



Fagan archive, undated.

STAUCH, Hellmut Wilhelm Ernst (1910-1970) was born in Eisenach, Germany, emigrating to Southern Africa in 1935 after an informal architectural training. He formally qualified in 1946. "During the period with Nunn he designed several buildings, feeling his way towards what has been identified as his mature style - one in which the function of the building, his point of departure, dictated through his preference for practical materials and form a rational, rather austere but thoughtful design approach which was sensitive to local conditions. He was, for instance, always aware of the sun bringing it into his work, at the same time protecting the building from glare. This awareness is consistent with his earlier studies in designing for very hot climates. Stauch worked almost exclusively in and around Pretoria where he made his home, experimenting with industrialised building components to bring South African building methods more into line with the twentieth century in Europe. Stauch apparently discarded Corbusier for Niemeyer, Wright and Eaton. By 1940 Hugh Casson had already spotted Stauch as among Pretoria's forward-looking architects in an article he wrote which appeared in the *Architectural Review* (August 1940), in which he concentrated on Pretoria, selecting buildings by W.G. McIntosh and A.V. Nunn with Stauch almost exclusively. A further biographical note was made in the *Architectural Review* (June 1953:382): 'In 1943 Stauch joined the staff of the School of Architecture at the University of Pretoria as a lecturer in design under the newly



Garden and Home, May 1969.

appointed Professor of Architecture, AL Meiring, teaching there for eight years. (<http://www.artefacts.co.za/main/Buildings/archframes.php?archid=1614&countadd=1> [Accessed: 11/04/2012 14:20]).

TANGE, Kenzo (1913-2005) was a Japanese architect who was awarded the 1987 Pritzker Prize for Architecture. He was influenced by Le Corbusier and attempted to create a new architecture that synthesised traditional influences and modern construction techniques (Curtis, 1996:507-509).



http://en.wikipedia.org/wiki/Kenzo_Tange [Accessed: 11/04/2012].

TENGBOM, Ivar (1878-1968) was a Swedish architect best known for his romantic Classical revival work in the early part of the 20th century. Revel Fox worked in his son Anders's practice from 1951 to 1952 (<http://www.whoswhosa.co.za/revel-fox-2981> [Accessed: 11/04/2012 19:49]).

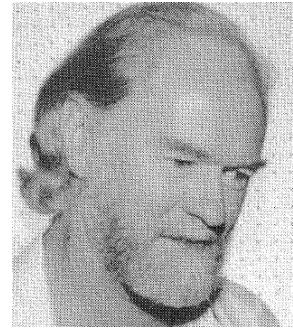


http://en.wikipedia.org/wiki/Ivar_Tengbom [Accessed: 11/04/2012].

THERON, Danie (1936-2011) was born in Citrusdal and studied at the University of Cape Town, followed by postgraduate education in Stuttgart and at the University of Pennsylvania under Louis Kahn. He formed a partnership with Hans Hallen and set up practice in Durban, taught at the University of Natal and eventually became the head of the Department of Architecture at the then University of Port Elizabeth (now Nelson Mandela Metropolitan University) (www.cifa.org.za/UserFiles/File/DanieTheronCit.doc [Accessed: 18/08/2011 07:35]).

UYTENBOGAARDT, Roelof Sarel (1933-1998). Undergraduate training in architecture at the University of Cape Town. Awarded the RIBA Rome Scholarship (1957). After two years in Rome, studied under Louis Kahn and David Crane at the University of Pennsylvania. Visiting lecturer to several US schools. Joined the Faculty of Architecture at UCT (1967); Professor of Urban and Regional Planning (1970); then Professor of Architecture and Planning. Has received several design awards. Believes in a small office in which work is given personal attention, and therefore had a studio at home. In 1985 was in association with Norbert Rozendal and at the time of the Steinkopf project was in partnership with Ian Macaskill

(<http://www.artefacts.co.za/main/Buildings/archframes.php?archid=2099&countadd=1> [Accessed: 11/04/2012 14:25]). His early work was influenced by Le Corbusier and Kahn but later reflected a more contextual approach with Alvar Aalto nuances.



UIA International Architect (8), 68.

VAN DER ROHE, Ludwig Mies (1886-1969) was a German architect who ran the Bauhaus briefly in the 1930s before emigrating to the United States of America in 1937."He worked in Behrens's office over the period 1908-1911 and was exposed to the idea of a 'normative' synthesis for modern industrial design and to the entire question of an industrial culture uniting the pragmatic and the ideal" (Curtis, 1996:142). He later depended on "the rectilinear style reliant upon the poetic accentuation of structure and technology" (Curtis, 1996:188).



http://en.wikipedia.org/wiki/Mies_van_der_Rohe [Accessed: 11/04/2012].

VAN WOUW, Anton (1862-1945) was a Dutch born sculptor whose works include the statue of Paul Kruger in Church Square in Pretoria and others on the Voortrekker Monument. Norman Eaton designed his house in Brooklyn which Harrop-Allin (1975:32) describes as "romantic and organic" in its expression.



http://en.wikipedia.org/wiki/Anton_van_Wouw [Accessed: 12/04/2012].

WELZ, Jean (1900-1975) was born in Austria and was educated under Joseph Hoffman, later working for Adolf Loos. He emigrated with his family to South Africa in the 1930s and worked in Johannesburg for Cook and Cohen. After being diagnosed with tuberculosis in 1939 he settled in the Cape and continued his passion for sketching. In 1947 he was awarded a Silver Medal for a pastel

he submitted to an exhibition by the South African Art Academy.
(<http://www.johansborman.co.za/artist-biographies/welz-jean> [Accessed:
2/8/2011]).

13.11 APPENDIX K

EXAMINERS' COMMENTS AND AUTHOR'S RESPONSES

<p>PROF MARIEKE KUIPERS (1951-) Delft University of Technology Netherlands Agency for Cultural Heritage</p>	<p><i>Author's responses</i></p>
<p>General</p> <p>The PhD candidate has made a great effort to disclose the design ideas and domestic architecture of Gawie Fagan to interested readers by means of thematically organised and well-written chapters, supported by a large number of descriptions, quotes and illustrations, in a subdivided structure. This makes the result a valuable contribution to the international knowledge on a thus far - from an international perspective - lesser known part of modern architecture in South Africa. It is obvious that the multi-faceted work of Gawie Fagan deserves a scholarly research, both for his design concepts and the regional and international context. However, the supposed adoption of a 'Pretorian PhD research format' causes, unintentionally, confusion with this examiner, who is trained as an architectural historian in The Netherlands and is neither familiar with the hypothesis-based approach - despite a long experience in PhD examinations and a broad knowledge of both scholarly publications in the field of 20s' century international architecture and intercontinental field inspections - nor with the South African situation. Nevertheless, my expertise (e.g. as the secretary and vice chair of the International Specialist Committee on</p>	<p><i>The thesis structure is currently defined by the Faculty and was determined on the advice of the Departmental research committee. The Pretoria format clearly needs revision and the issue should be taken up by the examiner with the supervisor and the research committee.</i></p> <p><i>The author attempted to limit the influence of the 'hypotheses' in the way the sections are named and chapters described. In essence the thesis attempts to become 'monographic' within the restrictions of the university system.</i></p> <p><i>In hindsight the author should have been more vociferous in the 'amendments'.</i></p>

<p>Registers of the international organisation (DOCOMOMO) may be regarded sufficient for a serious examination.</p>	
<p>What is difficult for me is the seemingly 'a-historical' and 'non-critical' conceptual framework and so is also the reasoning of the selected key concepts, which result, to mention just some of the reasons for my confusion, in a kind of chronological hip hopping in the chapters and a rather uncritical idea of 'style' (c.f. J. Mordaunt Crook, <i>The Dilemma of Style, Architectural Ideas from the Picturesque to the Postmodern</i>, Chicago Press 1987) and a certain orthodoxy in the interpretation of the Modern Movement in architecture, which is strongly associated with Le Corbusier.</p>	<p><i>My understanding of 'critical thinking' is that it encompasses 'observation, interpretation, analysis, inference, evaluation, explanation and meta-cognition'. It determines 'patterns and makes connections, solves problems'.</i></p> <p><i>Is there perhaps a distinction to be made between 'historical criticism' and 'architectural criticism'?</i></p> <p><i>I don't agree that the framework is 'a-historical' (failure to frame an argument in an historical context or disregard historical fact or implication). A clarification from the examiner as to what she refers to as 'a-historical' would be useful. Perhaps her background as an architectural historian lends a nuanced view of architecture that is different to my spatial and formal architectural bias - a more direct connection as an educator, more involved with the building and less involved with the theoretical 'text' that supposedly underlies it. My study is a contextual one that responds directly to built form. (An understanding of Fagan's texts seldom allude to the genesis of the designs save for descriptive texts) so an understanding of the historical context was the most important consideration.</i></p> <p><i>I could also argue that I have adopted an 'explanatory critical stance (as opposed to an operative one that affects the evolution of architecture) that is diachronic (understanding the architecture over time) in its underpinnings'.</i></p> <p><i>My critical approach has involved what the architectural historian James Ackerman quotes as 'response and interpretation'.</i></p>



<p>What might have been difficult for the researcher is to keep a certain distance to his subject, especially if the architect is still alive and kicking and sympathetic, too, for an objective analysis. To keep distance and to avoid a certain 'hagiographic' interpretation is a general problem for similar monographic studies and probably this is one of the reasons to construct pre-set conceptual frames for a research strategy according to - what I call - the 'Pretorian format'. From a methodological point of view, a combination of architectural and archival research, interviews and site inspection is very common in pondering studies on (domestic) architecture.</p> <p>What matters is the critical analysis of the findings and its theoretical base. In that respect, it would have been desirable that the candidate would have studied also some more critical international publications on the Modern Movement (e.g. Panayotis Tournikiotis, <i>The Historiography of Modern Architecture</i>, MIT Press 2001) and the Journals and Proceedings of DOCOMOMO (e.g. of the Conference 'Other Modernisms') and social scientific or philosophical theories to become more reflexive and critical with regard to his concepts, interviews and associations and interpretations.</p>	<p><i>Although I agree that a more holistic understanding of perhaps 'Western metaphysical' constructs of the MM may have broadened an understanding of the MM I have attempted to place an emphasis on the development and mediation of the MM in South Africa and have thus concentrated on local publications. This was done to broaden the understanding of the development of the MM in South Africa. I am sure, however, that an understanding other texts would give more insight to revealing local developments and can certainly be the subject of later investigations. The emphasis in this thesis was on Fagan and his inherited MM education.</i></p>
<p>What would also deserve a bit more clarification is the deliberately exclusive focus</p>	<p><i>Fagan's oeuvre is too large to be investigated as a whole. His houses exhibit consistent evidence of</i></p>



<p>on Fagan's domestic architecture.</p>	<p><i>responses to inherited tradition and MM influences more so than his other work. His commercial work is limited and relies more heavily on a MM approach (Fagan has himself noted that it would be inappropriate to use vernacular principles on larger buildings) and others are/have been writing on his conservation approaches. The study has made reference to Fagan's other work where cross influences could be identified.</i></p> <p><i>p.8 : "houses represent a consistent scale and functional typology where patterns can more easily be discerned" (Atkins, 2008: 135), while "the individual architect-designed house is a distinct category of artistic and cultural production" (Davies, 2006:10).</i></p> <p><i>p.12. "Pedagogically, the study will provide an understanding of an architect's design process and approaches which are important aspects for students of architecture". Houses are most suitable for this exercise</i></p>
<p>It is seriously appreciated that the dissertation gives an overview of specific terms on p. XVIII, and that these are all elucidated in their linguistic origin and their application, but it remains sometimes unclear if the author has chosen these terms because he came them across in Fagan's writings or interviews or if he had his own reasons to relate these terms to analyse Fagan's architecture, e.g. 'attenuation' or 'historical typology'. The references to various historical sources seem a bit awkward here and there, in the context of an analytical study of a contemporary architect.</p>	<p><i>They are definitely my own terms developed as a response to initial hypotheses and later refined after investigations and analyses.</i></p> <p><i>Historical sources are used to bolster the hypotheses of lineage in the development, particularly of the inherited tradition. Fagan's architecture does not only have an MM lineage but a deep vernacular one that is deeply tied into the experiential and the continuity of architectural language that has its antecedents in 'the primitive' or the 'unconscious' indigenous responses. Due to his Afrikaner heritage an association with the earth etc. is very important.</i></p>



<p>The author indicates on p. 27 what he understands by the key concept 'heterotrophic', but he could have elaborated more explicitly why such a - biologically based - neologism is, to his mind, essential to characterise Fagan's work and if it is a crucial distinction in comparison to similar fusions of regional/vernacular and Modern Movement architecture elsewhere (e.g. 'Other modernisms' or 'Tropical Modernism').</p>	<p><i>The term is not used as a theoretical tool for analysis but rather a structuring device or methodology for ordering the thesis. I searched for a term to describe, in a generic way, Fagan's architecture as the result of syntheses, contradictions, commonalities and discontinuities etc. in the main as a living result that, like a chameleon, changes to suit its environment and other influences. It is not only related to an understanding of MM. It encompasses Fagan's entire life and work.</i></p> <p><i>p.26. These personal and professional dichotomies probably fuel the development of inventive architectural approaches, those that deal with complexity rather than simplicity.</i></p> <p><i>It follows from Fagan's own understanding of the evolution of cities as similar to biological processes. It aligns with ideas of the vernacular as being accretive and Rapoport's use of biological systems to understand the vernacular. Therefore different to other MMs as it has a strong vernacular bias and accretive bias.</i></p> <p><i>Explains the relationship between the human body and architecture in Fagan's corporeal strategies of climatic response and haptic sensibilities of the architectural promenade and material usage.</i></p> <p><i>It was also a suitable term as its constituents like 'hetero' and 'trophic' opened up other investigative possibilities like 'otherness' and state of 'ic'.</i></p> <p><i>I don't think that it is crucially different to other MM fusions but the term is unlike any other I have come across. Most tend to explain MM fusions as simplistic synergies.</i></p>
<p>Most confusing is, to me, the application of</p>	<p><i>I agree that all architects mediate design concerns</i></p>



the term 'mediation' in this dissertation as to typify Fagan's work to mediate between architectural polarities and dichotomies and to assimilate commonalities. Like every architect, Fagan is a mediator between his clients and his architectural design vocabulary of new and old creativity. Perhaps Fagan is a better communicator with his clients than average, or he is willing to take more time for talks, but the question puzzles me what exactly would make Fagan's position so different that 'Mediation' is crucial. My first association with the term was in another direction: the way that architecture is being presented and perceived - mediated by means of images, such as drawings, models, photographs, films, etc. or in press and publications (e.g. K. Rattenbury, ed., This is not architecture, media constructions, London, Routledge, 2002) - but that is clearly not the candidate's intention

but it struck me that Fagan's life experiences and 'synthesis' of polarities were unique in the SA situation as no-one has (or even has since) developed such a personalised take on the inherited tradition and MM education. The term provided a medium to express his life and work as a mediative condition and that a consistency of approach was developed to all these facets. The term mediation then also allowed a derivative condition of 'attenuation' to be postulated that could explain how polarities were formally 'presenced' in his built work

ORIGINS:

- 1. I wanted a way to frame my personal critique on architectural theory which I feel tends to polarises debates with a resultant resistive reaction to what has gone before and the posits a new formal response. Although I recognise that not all theorists do this I wanted to find a way of expressing this 'other' condition.*
- 2. My haptic experiences in Fagan's buildings led me to the conclusion that there was a clear relationship established between the formal and spatial polarities of the inherited tradition and MM but that both were 'presenced' and that neither were dominant or downplayed. (I have had experiences in MM buildings as well). This was, for me, different to other architects like Tadao Ando or even Niemeyer where the modern influences were quite dominant and the influences of the vernacular perhaps too principled and limited in their formal content.*
- 3. Mediation was a necessary term as there are no other examples in this country of architects that have adopted a principled understanding of the 300 year old*



vernacular tradition with localised MM understanding.

- 4. My initial understanding of the man himself also exposed polarities in his life. Hand and mind, engineering and architecture and later conservation and new work. These needed a methodology for explanation.*

APPLICATION:

- 5. I wanted an 'internal' methodology to unpick his work. I felt that layering another theoretical viewpoint on the architects work would take away from its inherent contextual bias that was deeply ingrained in the man and less affected by theories. His upbringing, educational and work experiences has built his architectural approaches . (He stopped buying magazines and prefers to read monographic studies).*
- 6. The term allowed the development of a series of mediations to be described that could frame how MM, the vernacular and Regionalist viewpoints had been unconsciously adapted by Fagan to form his own unique architectural responses.*
- 7. The use of the term 'mediation' allowed the development of a further term 'attenuation' that could explain how the architecture positioned itself (in a formal sense) on the scale of polarities. As an architect I am interested in the development of form and therefore wanted to find a way of explaining the approaches and elements that Fagan has developed over time. Hence my interpretative and replicative vernacular standpoint. This is counter to the Neo-Rationalist standpoint of someone like Aldo Rossi whose*



	<p><i>standpoint on 'pathological conservation' was recently quoted by one of our leading architects as being a negative architectural strategy.</i></p> <p><i>Although I agree that Fagan may mediate between client and design vocabulary he also consciously and internally mediates within the design vocabulary with a principled understanding of the inherited vernacular and an understanding of the MM that is 'modern'. Do other architects attenuate or just compromise? If one thinks of Uytendogaardt or Gallagher there was no attempt at a synergy with an inherited vernacular. More often than not compromises are reached where one influence is dominant. Tadao Ando's work is ashamedly modern and loses haptic and associative qualities. Siza's does as well in his later work too. Fagan has been consistent even with new technologies.</i></p> <p>.</p>
<p>As for the characterization of the Modern Movement in architecture and its mediations, it has to be noted that Le Corbusier was not the only head figure albeit perhaps for Fagan's own perception like that.</p>	<p><i>Le Corbusier is highlighted, not because of the general perception of his dominance of the Modern Movement but rather the importance of his documented work that students like Fagan had access to and devoured. Le Corbusier's architecture has as its foundation the non-facile use of tradition which ties into Fagan's appreciation of our local vernaculars. Le Corb's Mediterranean leanings and mediation between orthodoxy and vernacularism are also important and common connections. Mention was made of the counter movement to the orthodoxy of MM from which many other MM mediations followed, not unlike those in SA. (Bauhaus - Gropius and later Mies).</i></p> <p><i>Fagan closely followed the master in his development of 'typologies' and are similar to Corb's 'constants' such as singular recognisable</i></p>



	<i>form, type from function and use of proportions.</i>
<p>Design Process</p> <p>Interestingly and typically for the a-historical approach, the candidate starts with an indirect citation of Herman Herzberger's description of creativity that might find parallels in the work of the seven years older Fagan, but there is no evidence given that the architects know each other's works or design approaches from first hand (and, as a minor side-issue, Herzberger is not included in appendix J). The same is valid for Oscar Niemeyer (who is older). I can imagine that Herzberger's and Niemeyer's thoughts on the design process are relevant for an analysis of Fagan's approach, but the justification to choose particularly these more or less contemporaries seems absent.</p> <p>What does make Fagan's 'layered' approach more special than that by other architects of his generation in South Africa? Does it provide useful lessons for the design process of 21st c. architects, who are nowadays mainly working with CAD systems? These questions are difficult to answer, at least for me.</p>	<p><i>The quote was used to elicit an understanding of the design process as pragmatically biased. I do not think it is necessary to at every point in the thesis justify every source explicitly. At times implicit connections are all that are necessary. The indirect quotation is important as the reference is more closely associated with Lawson's writings on the creative process rather than a direct connection with personalities. The quote was a happy accident that drew together ideas of pragmatics and creativity.</i></p> <p><i>I am not suggesting that it is more special than any other approach except in the sense that an ingrained knowledge and appreciation of the local vernacular have fostered a pragmatic approach to design informed by the tertiary education at UP. The result is certainly unique in South Africa.</i></p> <p><i>The drawing is, for Fagan, not as important as an outcome as the building is so the medium of design development has varied as technology has developed. The thumbnail sketch is however still Fagan's most important design tool.</i></p>
<p>Formal tensions and typologies</p> <p>The candidate states that the main feeders for Fagan's architecture are the inherited tradition of vernacular buildings and a 'mediated' Modern Movement architecture, according to the author mainly represented by the work of Le Corbusier, but also by Alvar</p>	<p><i>Yes, although the framework may seem to be rigid it merely frames the polarities with each design mediating between. The difficulty is to explain formal mediations as non static and ever changing and perhaps the terminologies that have been used to define them create an impression of</i></p>



<p>Aalto, with a reference to Tadao Ando's comments on universality and regional differentiation.</p> <p>Sometimes it seems to me that the supposed tensions are more the result of the author's attempts to fringe Fagan's architectural varieties in a rigid conceptual framework rather than of technical or professional tensions in practice.</p> <p>However, what would have deserved further elaboration is Fagan's deep involvement in conservation work, which made him directly familiar with constructional features and forms of the vernacular, but belonged to a professional activity that was often considered as opposite to the Modern Movement.</p> <p>Another aspect that is only partly touched upon is the total spatial organisation as an architectural whole; now one can only detect this from the illustrations and the descriptions of the subdivided components.</p>	<p><i>'rigidity'.</i></p> <p><i>This was explained on p.180 - lessons from the vernacular. I don't see the professional activities of 'conservation' and 'new work' as mutually exclusive. The MM attempted to critique the facile use of tradition</i></p> <p><i>I agree that this could have been more clearly illustrated. I was hopeful that the reader could draw the inferences.</i></p>
<p>Illustrations and appendices</p> <p>The submitted draft contains sufficient illustrative materials to support the texts substantially and comprehensively; it must have been a tremendous task to collect, sort and select all visual materials and to indicate all locations. The availability is a great advantage for everyone who is interested in Fagan's domestic architecture, that certainly deserves a wider audience. In some cases, however, the layout and readability could be improved in case of a printed edition (specially plans).</p>	



<p>The illustrations on pages 475-479 show that Pagan has a well supplied library, but the dissertation does not really give a clue to the library's content and the architect's preferences. That is a bit disappointing for a critical and interested reader.</p> <p>Instead, appendix J is a kind of haphazardly composed 'Archi-pedia', which is in its selection and elaboration not always consistent with the main chapters.</p>	<p><i>I agree.</i></p> <p><i>Fagan stopped purchasing 'glossy magazines' a few years ago and prefers to read 'monographic' studies and historical accounts. I agree that the appendix needs an explanation but perhaps the reader can draw his/her own conclusions.</i></p> <p><i>This was an attempt to contextualise relevant personalities. I am not sure how they are inconsistent with the main chapters?</i></p>
<p>The inclusion of the interview questions gives more insight in the seemingly uncritical research approach of the candidate, who tends to be positively bi-assed for Fagan's domestic work as 'unique'. Affirmation of such a supposition can be easily obtained then. More open questioning would have been desirable.</p> <p>Nevertheless, it is also a great effort to conduct a series of more or less consistent interviews, which contribute largely to a better understanding of Fagan's position as a practicing architect, which is also supported by the abundance of biographical data.</p>	<p><i>The questions to clients and employees were framed at the outset of the study and posed early on. They were intended to elicit initial responses for the thesis and in hindsight should have been revisited later. Two such interviews were done one with Rennie and one with Lourens. I agree that open questioning would have been more useful but an initial 'critical' structure was envisaged that would achieve consistency between interviews as well as honing the direction of initial 'hypotheses'.</i></p>
<p>Conclusion</p> <p>All in all, despite some critical observations, I may conclude that the dissertation is based on profound research by various means and that it has resulted in a broad and clarified overview of Fagan's personal mixture of South African vernacular and modern domestic architecture. The draft makes also curious to the non-domestic designs and his writings. The abundance of materials is</p>	<p><i>Perhaps I have been purposefully selective in my awareness of 'historical differences or</i></p>



overwhelming - both facts and illustrations - but Arthur Barker proves a well-informed guide through it for a disciplinary and geographically outsider as this examiner, even if he seems not always aware of the historical differences or circumstances. To my recommendation, the candidate may pass.

circumstances' to prevent an over-inflated or overly theoretical analysis of an architect's work that is essentially contextually influenced and pragmatically biased.



	<p>GILBERT HERBERT (1924-) Professor Emeritus, Technion: Israel Institute of Technology, Haifa</p>	<p><i>Author's responses</i></p>
	<p>I confess that I approached this dissertation with some apprehension, as I did not understand the title, and knew nothing of Gabriel Fagan, the man and his architecture. Having now carefully read the work, while the title in my view still remains unnecessarily obscure, the 'thesis has given me an understanding of Gawie Pagan as a man and a highly creative architect, and of the context of ideas and circumstances in which he worked. My conclusion is that in principle the topic is an important one, meriting a serious study such as this dissertation, and that Mr. Barker's research, undertaken conscientiously and intelligently, and its scrupulously documented presentation, does it full justice. In other words, I believe that this is a scholarly thesis which makes a significant contribution to knowledge, and thus fulfils the principal requirement of a doctoral dissertation. I therefore recommend that it should be accepted.</p> <p>Let me comment on some specific aspects of the thesis:</p>	
	<p>Analysis of Pagan's architecture: The thesis shows an intimate knowledge and understanding of Pagan's domestic architecture. The author's appreciation of the architecture is mature, thoughtful, and insightful. It is sensitive to detail and ambience. Its concentration on each</p>	<p>I agree</p>



	<p>separate aspect is necessary, in order to relate it to the various levels of the hypothesis, but the work is less convincing when relating to the synthesis of these particulars as an architectural whole.</p>	
	<p>Style: The candidate has a rich but highly idiosyncratic vocabulary, which in my view does not add to the clarity of his explanations of complex issues. There is an ironic dissonance between the overburdened choice of language and the architecture of simplicity, directness and economy of means celebrated in the dissertation. There is also a tendency to repeat information, perhaps natural in a didactic thesis (the old teaching procedure: first I tell you what I am going to tell you, then I tell you, and finally I tell you what I told you) which is mildly irritating.</p>	<p>Perhaps my pedagogic bias has led to this approach.</p>
	<p>Biography: The study of Fagan's life experience, and the formative influences which shaped his approach to architecture - personal, familial, environmental, peripheral, educational - is comprehensive and empathetic. I found this not only the most readable section of the work, but the most enjoyable. The decision to include notes on Fagan's design process - an interesting section, not often found in such studies - threw extra light on Fagan as a person, and enhanced our understanding of his architecture.</p>	
	<p>Documentation: The documentation is exemplary in its noting of sources and the presentation of findings. The scholarship is sound, with</p>	



	<p>ample evidence of a wide acquaintance with the relevant literature, and considerable direct archival and field research, in respect of the examination of the works in question, the related documents, and in personal consultation with key figures in the narrative.</p> <p>Secondary information provided in the appendices, although not an essential part of the dissertation, is a valuable resource for other research. In my opinion the thesis does not require major corrections, but as I have had less than a fortnight to read, absorb and assess a very weighty document I have not been able to give it the close scrutiny which would enable me to point to any typographical or factual errors. I am not sure I agree with all of Mr. Barker's affirmations, and believe that some are disputable, or at least need clarification. As it would be unfair to demand changes without hearing Mr. Barker's response, it may be of value to raise some of these as questions during the oral examination, which unfortunately I shall not be able to attend: These include the following:</p>	
	<p>1) To what degree did the schools of architecture in Johannesburg and Pretoria follow different paths? I was associated with Wits from 1942 to 1961, as a student and then a full-time teacher. We were not detached from our northern neighbour in Pretoria, nor was I aware of a parting of the ideological ways. Through the annual publication of Wits and Pretoria students' work in the Record we were aware of each other. There was also personal interaction:</p>	<p>I don't recall arguing that the schools were ideologically different but rather that in general terms there was a shift in economics (economic use of locally available materials both natural and man-made) and politics (as Chipkin 1993:278 notes from capitalism of the south to the bureaucracy of the north)that fostered a negation of colonialist architectural traditions <i>and</i> a mediation of the machine aesthetic of the MM espoused at Wits.</p> <p>The school was formed at a time of material and</p>



<p>Howie had taught in Pretoria, as did Gordon McIntosh, and both were stalwarts of the Transvaal Group (Gordon, incidentally - together with Walter Battiss - was the supervisor of my Martienssen thesis); and, if my memory serves me. Prof. Meiring took part regularly in Wits final year oral examinations.</p> <p>We took our students on tours to Pretoria, to see the much-admired work of McIntosh, Eaton and Stauch, and while the domestic architecture of Baton leaned strongly to the vernacular, it is debatable that Stauch did.</p> <p>When Brazil Builds came out it impacted seismically on Wits, just as Barker says it did in Pretoria.</p>	<p>monetary shortage and was the first Afrikaans school where students were said to have had 'a subjective preoccupation with design and not much interest in design philosophy' (p.124 Arch of the Tvl.).</p> <p>The architecture of De Zwaan with his pyramid roof houses (stripped of ornamentation and the provision of a deep veranda) already began a regionalist style at the turn of the 19th C.</p> <p>McIntosh's 1938 home in Brooklyn was a more rustic interpretation of the Transvaal Group with its bagged and painted walls.</p> <p>The personalities associated with these attitudes were located in Pretoria and were associated with teaching at the University of Pretoria while the influence of the 'regionalist' teachers like Stauch, Cole Bowen and Eaton were I suspect more influential (in practical and regional ways) than those at Wits and so could have created the 'ideological shift'. Gordon Mac was only part-time.</p> <p>It continued a regional tradition established by Baker, Leith (schooled in Pta and educated at the AA after working as a draftsman at PWD and associated with Moerdijk, mediated between his traditional perhaps classical work and MM, while his houses had Mediterranean references!), Eaton. Meiring's first staff appointment was Eaton.</p> <p>I recall arguing that Stauch's work was regional not vernacular. Fisher has argued that a Third vernacular developed. I maintain that Stauch's work is responsive to the Pretoria condition through its use of local, natural materials and response to climate and an already mediated MM training in Germany where the use of natural materials did not take away from MM ideas. Corb said the same thing p. 83.</p>
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		<p>Both Eaton and Stauch visited Brazil and as both taught at UP one could argue that the influence on the students was greater there. Gerneke (1998:215) does, however, argue that the Brazilian influence was marked in the student exhibitions of <i>both</i> Wits and Pretoria. I have not done enough investigation myself to make a definitive determination.</p> <p>p.100 of my thesis.</p>
	<p>2) To what degree did le Corbusier influence Fagan? Barker contends that le Corbusier was an inspirational figure for Fagan. Was this the iconic Corbusier of Villas Garche and Savoie, or just the Corbusier who occasionally flirted with the vernacular?</p> <p>One would have thought that Frank Lloyd Wright would have been a more relevant role model; if so, where does he fit in, in Fagan's formative years?</p>	<p>Le Corbusier's influence was explicitly through his canon but I think more implicitly through his and Fagan's common love of the Mediterranean and their search for truth from tradition. Fagan bought all of his books and he and his classmates would devour them while discussing the work - particularly with Karel Jooste. In particular Fagan was influenced by 'platonic form' and the 'architectural promenade'. Fagan has never been to Villa Savoye but has made the pilgrimage to Ronchamp and it was this building that had a major effect on the students at the time through its 'breaking of the rules'.</p> <p>p. 200 <i>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).</i></p> <p>p.143: <i>[S]o many lessons are still to be learned from work by architects like Eaton (Fagan, 1991a:8), and ... Eaton for having learned from Frank Lloyd</i></p>



		<p><i>Wright's Prairie houses and Hellmut Stauch (I had the privilege of having both these men as studio masters) who brought with him the discipline of the Bauhaus and later the intoxicating South American forms after his visit to Brazil (Fagan, 1991b:10).</i></p> <p><i>Steenkamp notes (2003:8-9) that Mies van der Rohe's work was also admired but that Frank Lloyd Wright's work was seen as too fussy.</i></p> <p>Talisen West was a direct influence on House Simpson in Elgin and lately on House van der Linde. FLW's influence can also be seen in the use of the chimney as a 'centrifugal' point in Fagan's architectural arrangements.</p>
	<p>3) To what degree does Barker's highly structured analysis of such concepts as the vernacular or regionalism represent a) his own original formulation, b) an accepted and authoritative theory, or c) a synthesis of a variety of different viewpoints? As the theoretic framework within which Fagan's architecture is assessed, all these approaches are perhaps valid, but it would be proper for the reader to know which is the case. This ambiguity arises from Barker's method of dealing with his sources. I believe that in all research we stand upon the shoulders of our predecessors.</p> <p>That means not only quoting from sources, which this research does in abundance, but</p>	<p>I regard them as a unique formulation that builds on the initial 'theoretical' constructs of mediation and attenuation and a critique of other viewpoints. It has always infuriated me when reading theoretical analyses of architectural movements or definitions of styles as subscribing to one or another philosophical approach. The author believes in architectural tradition of continuity and reflexivity where responses alternate on a scale of radical to conservative. The concepts are thus built on a platform of existing knowledge but are extended to form a 'scale of responses'.</p> <p>I believe that the platform of existing knowledge has been defined quite clearly at the beginning of each section whereafter the mediated responses have been outlined.</p>



	<p>defining the platform of existing knowledge of significant aspects, the better to define the contribution which the new research wishes to make.</p>	
	<p>This thesis does make clear the state of knowledge about the life and work of Gawie Fagan. It is less definitive in relation to the theoretical and historical dimensions of the work.</p>	<p>Very little critical writing has been done on Fagan's work. p. 6 <i>"His work is not well researched and although a self-publication, Twenty Cape Houses, was released in 2005, it contains a limited descriptive text that does not contextualise or critique his domestic architecture. It also does not tell us about the life of this seminal architect or his influences and philosophies.</i></p> <p><i>All the architectural ideas, theoretical positions, inspirations, influences and contemporary reassessments are left for the reader to speculate about. The book does not give interpretation, it asks for it (Wolff, 2006:5).</i></p> <p><i>The book makes light of questions of his identity, glossing over the rich biographical opportunities to critically contextualize his background and strongly held social, cultural and political convictions (Murray, 2006:57).</i></p> <p><i>Indeed, Fagan (1983c:50) has himself noted that "I have seldom bothered to document my own finished work – nor has anybody else".</i></p>
	<p>It is important that this study of a significant South African architect should be widely disseminated. It should certainly be published, but not necessarily in its present form. The following comments are intended as food for thought when Mr. Barker sets about amending and editing his thesis (a research document) for publication as a readable communication to a wide audience (a book, or series of papers).</p>	<p>The intention is is to produce a series of monographs.</p>



	<p>Presentation:</p> <p>The dissertation is visually satisfying, and its graphic design and the organization of text is carefully considered. However, owing to the abundance of illustrations the images are small and not always easy to interpret. In a publication, fewer illustrations and a larger format would be helpful.</p>	I agree
	<p>Emphasis:</p> <p>In an eventual publication perhaps a decision should be made as to where the emphasis should be laid. Is it to be a work substantiating a thesis - Fagan's architecture as a unique synthesis between modernism, the vernacular and regionalism - or does it aim at bringing to the public attention a critical appreciation of Fagan and his work? If the former, establishment of an authoritative theoretical base is necessary; if the latter, a reduction and simplification of the present theoretical framework is advisable, together with an amplification of the architectural studies, perhaps by the inclusion of a limited number of case studies looking at the houses as a whole. Or perhaps not a book but separate publications are called for, papers of substance each laying the emphasis on one or other of the two pillars upon which this dissertation stands. I strongly believe that there are different requirements in form and content for an academic thesis and a publication. Mr. Barker should consult with his supervisor on these strategic issues.</p>	
	Finally, my thanks to Arthur Barker for a	



	<p>thoughtful and sensitive thesis, which gave thesisme an opportunity to get to know an intriguing personality, and a challenging corpus of work of which I was completely unaware.</p>	
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Chapter 13

APPENDICES



Letter to Fagan from his father (1963) (Fagan archive), House Raynham (1967) (Author, 2008), Fagan in his office (Author, 2008).

This section contains information that is important to the understanding of the study but which cannot be contained within the body of the text due to the volume of content or its peripheral value. It is, however, important that this information be read together with the text as it contextualizes or expands on content.

The following appendices are included:

- 13.1. APPENDIX A: Curricula Vitae of the architect and his wife
- 13.2. APPENDIX B: Family tree
- 13.3. APPENDIX C: Awards
- 13.4. APPENDIX D: Letters of motivation for honorary membership of the American Institute of Architects (AIA)
- 13.5. APPENDIX E: Domestic architecture project list summary
- 13.6. APPENDIX F: Data sheets of individual buildings
- 13.7. APPENDIX G: Student work
- 13.8. APPENDIX H: Books in Fagan's library
- 13.9. APPENDIX I: Interview questions
- 13.10. APPENDIX J: Précised biographies of important personalities related to the study
- 13.11. APPENDIX K: External examiners' comments and author's responses

13.1 APPENDIX A

CURRICULUM VITAE

GABRIËL THERON FAGAN

Born Rondebosch, November 15, 1925.

Senior certificate Jan van Riebeeck, Cape Town 1942

B Arch, University of Pretoria, 1951

PROFESSIONAL CAREER:

Resident Architect Volkskas Bank, 1952 – 1964.

Responsible for maintenance and recycling of their buildings throughout South Africa, and designed 50 new banks during this period.

Private practice in Cape Town since 1964.

Part time lecturer in design - University of Cape Town, 1970 - 1972.

Monthly columnist on architecture for the Cape Town daily paper, "Die Burger" October 1984 – June 1987.

Co-author of the book "Church Street in the Land of Waveren" which records the restoration of Tulbagh – 1974 after the 1969 earthquake.

Photographer for book "Roses at the Cape of Good Hope" by Gwen Fagan – first published 1988, reprinted 1989 & 1995.

Author of the book "Twenty Cape Houses", first published 2005.

Author of book "Brakdak: Flatroofs in the Karoo", first published 2008.

Foundation and Honorary life member Vernacular Architecture Society.

Member of the Architectural Heritage Committee, South African Institute of Architects 1982 - 2007.

Member of the Council for the Environment from 1982 -1994.

Lecturer at the V&A symposium on Identity and Sustainability in London, November 2009.

Member of the board of trustees of:

Bo-Kaap Trust from 1990 - 1994

Cape Town Heritage Trust from 1988

Groot Constantia Trust – board member and honorary member from 2002

Simon van der Stel Foundation, life member

Special Awards:

1991 Fulton Award: Klein Constantia: New Maturation Cellar, Constantia Valley, Cape Town

1993 Fulton Award: Environmental Sculpture, Cape Point Entrance Gate

1996 Fulton Award South African Breweries, Parking deck

2000 Laureatus Award Alumni Board University of Pretoria

2008 Hon. Fellow of the American Institute of Architects

2010 City of Cape Town Civic Honours

Awards of Merit from the South African Institute of Architects

1968 La Dauphine

1971 Government House

1973 Tulbagh restoration

1983 Swanepoel House St Francis Bay

1985 Worcester Open-Air Museum

1987 Klein Constantia Wine Cellar

1989 Mossel Bay Museum Complex: Conservation Award

1993 Swanepoel House Hermanus

1997 S A Breweries Visitors' Centre, Newlands: Award of Merit

1998 S A Breweries Visitor's Centre, Newlands: Award of Excellence

2001 Weekend House Betty's Bay

2001 The Castle of Good Hope: Conservation Award

2002 The Castle of Good Hope: Award of Excellence

2003 Chavonnes Battery: Commendation

2005 Holiday House Paradise Beach, Langebaan: Cape Institute of Architecture, Award of Commendation

2005 UCT Institute of Infectious Disease and Molecular Medicine in association with MLH: Cape Institute for Architecture, Award of Commendation

2006 New Ink Building for the Institute of Infectious Disease and Molecular Medicine

Energy Effective Design:

1990 ESKOM Energy Effective Design Award for Klein Constantia New Wine Cellar

Other Awards for Conservation Work:

1979 Cape Times Centenary Award
1982 Tony Williams-Short Award
1984 Cape Tercentenary Foundation Award
2007 The CAPTRUST Award for Environmental Achievement

Sports:

1982 Winner of Trans Atlantic Cape to Punta del Este yacht race
1982 The South African Sport Merit Award: Navigation
2003 Winner Transatlantic Yacht Race to Bahia in his class, 3rd overall

Gold Medal Awards:

1973 Gold medal with G E Fagan from the National Monuments Council
1975 Gold medal from the South African Academy of Literature and Science
1982 Gold medal from the Simon van der Stel Foundation
1988 Gold medal of Honour from the South African Institute of Architects
1989 The Order for Meritorious

Service: Gold (State President's Award)

2000 Cape Tercentenary Foundation: Molteno Medal
2003 Chancellor's Award, University of Pretoria

Honorary Doctorate Awards:

2001 1991 D ARCH (HC) University of the Orange Free State
2002 D Phil (HC) University of Stellenbosch

Successful agitations for city improvements

Critical input regarding city engineer Dr. Morris's proposed freeways and parking garage in a sensitive part of the city which would have involved extensive demolition of heritage buildings.

Agitation in the media and by public meetings that the sea should be given back to Capetonians: February 1980. This led to the appointment of the Burggraaff Commission and the subsequent establishment of the V&A.



CURRICULUM VITAE

GWENDOLINE ELIZABETH FAGAN

Born in Victoria West 25.09.1924

Nationality South African

Gender Female

School at Rhenish Girls' High, Stellenbosch 1933 - 1942

Matriculated December 1942

MB ChB December 1948, University of Cape Town

Medical Practice until 1969

1949	Standerton General Hospital
1950	Pretoria General Hospital
1951-1958	No 1 Military Hospital
1958-1963	Locums - Municipal Clinics, Pretoria
1963-1969	Karl Bremer Hospital Paediatric Outpatients

Architectural Work

Since 1969 assistant in architectural practice Gabriël Fagan Architects. Work including in particular historical research, landscape planning and interiors.

Publications

Co-author with husband G T Fagan: "Church Street in the Land of Waveren" 1975 (Kerkstraat in't Land van Waveren)

Restorica: Several articles regarding restoration projects

"Roses at the Cape of Good Hope" 1988

"Nauti se Gwendoline" 1999 (Afrikaans biography of childhood)

Compiler of "Brakdak", a book of black and white photographs taken in 1950s of the Karoo by Gabriel Fagan, published 2008

Awards

Gold Medal with G T Fagan from the National Monuments Council for the research and restoration work in Church Street and the Drostdy in Tulbagh, 1973

Cape Tercentenary Award 1986 for historical research and historical landscape restoration

Gold medal from the Simon van der Stel Foundation 1992

Silver medal of the VOC Society 2008

The Zoe Gilbert Merit Award from the Federation of Rose Societies of S.A

Honorary Doctorate

D.Phil (HC) from the University of Stellenbosch 1993

Honorary Memberships

Institute of South African Architects 1991

APES (Society of Architects Planners Engineers and Surveyors) 1992

Institute of Landscape Architects 1994

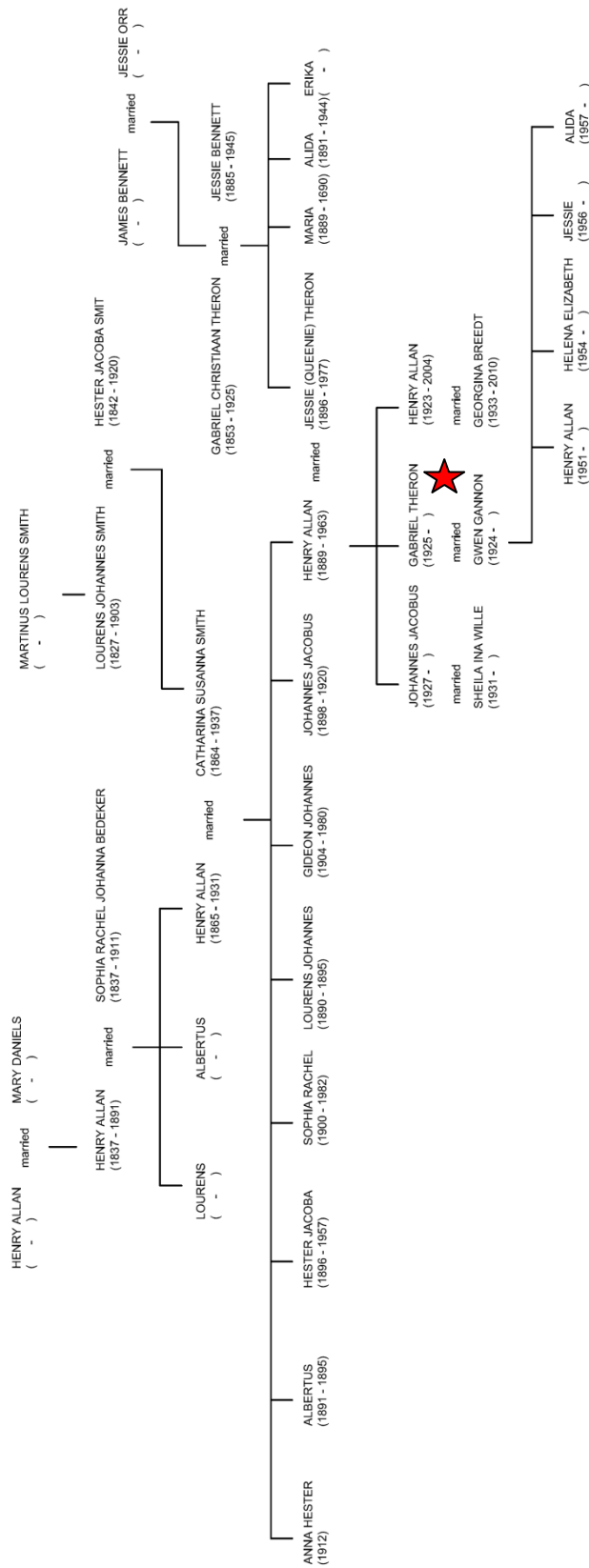
PhD

University of Cape Town "An introduction to the man-made landscape at the Cape from the 17th to the 19th centuries", 1995 – Faculty of Architecture

February 2010

13.2 APPENDIX B

FAMILY TREE (Author, 2009). Fagan's position within the tree is highlighted by the red star.



13.3 APPENDIX C

AWARDS				
	AWARD	PROJECT	DATE	YEAR
	S.A. Institute of Architects			
1.	SAIA Award of Merit	La Dauphine		1968
2.	SAIA Award of Merit	Government House		1971
3.	SAIA Award of Merit	Tulbagh Resoration		1973
4.	SAIA Award of Merit	House Swanepoel	19 October	1983
5.	SAIA Award of Merit	Boland Open-Air Farm Museum	29 October	1985
6.	SAIA Award of Merit	Klein Constantia Wine Cellar	27 October	1987
7.	ISAA Gold Medal Award	In recognition of an outstanding contribution to architecture through practice and design		1988
8.	ISAA Conservation Award	The Maritime and Shell Museum Mossel Bay	5 October	1989
9.	ISAA Verdienstebekroning	Huis Swanepoel Hermanus	28 October	1993
10.	SAIA Award of Merit	South African Breweries Visitors' Centre		1997
11.	SAIA Award for Excellence	South African Breweries Visitors' Centre	October	1998
12.	CIA Conservation Award	The Castle of Good Hope	18 October	2001
13.	SAIA Award of Merit	Weekend House Betty's Bay	18 October	2001
14.	SAIA Award for Excellence	Castle of Good Hope	30 August	2002
15.	CIFA Award of Commendation	Chavonnes Battery	25 July	2003
16.	SAIA Award of Merit	New Link Building for the Institute of Infectious Disease and Molecular Medicine	1 September	2006
17.	SAIA Award of Merit	New Holiday House Paradise Beach Langebaan	1 September	2006
	Fulton			
18.	Concrete Society of Southern Africa Fulton Award	Klein Constantia: New Maturation Cellar	14 June	1991
19.	Concrete Society of Southern Africa Fulton Award	Cape of Good Hope Nature Reserve Entrance Gate	11 June	1993
	University of Pretoria			
20.	Tuks Alumni raad	Laureatus Award in recognition of exceptional achievements and promotion of the interests of the University of Pretoria	25 November	2000
21.	University of Pretoria	Chancellors Medal	10 April	2003
	State Presidents Awards			
22.	State Presidents Order for Meritorious Service Class 1: Gold	For exceptional Merit by rendering exceptionally meritorious service in the general public interest	25 May	1989



	Other			
23.	Gold medal with G E Fagan from the National Monuments Council			1973
24.	Gold medal from the South African Academy of Literature and Science			1975
25.	Cape Times Centenary Award			1979
26.	Certificate of Appreciation by the Lotus International District 410	Contribution to Architecture and Conservation of our Heritage in Cape Town	20 April	1982
27.	Cape Tercentenary Foundation Award			1984
28.	Kaapse Drie Eeue Stigting Eervolle Toekenning	For outstanding work in Conservation in the Cape 1974-1984		1984
29.	Gold medal from the Simon van der Stel Foundation			1982
30.	Sertifikaat van Verdienste Munisipaliteit van Tulbagh	Vir uitstaande en onbaatsugtige diens gelewer onder moeilike omstandighede aan die gemeenskap van Tulbagh tydens die aardbewiging van 29 September 1969	29 September	1989
31.	Eskom Energy Effective Design Award			1990
32.	Cape Tercentenary Foundation: Molteno Medal			2000
	The CAPTRUST Award	For environmental achievement	October	2007
	Honorary Fellow of the American Institute of Architects (AIA)		May	2008
	Sports Awards			
33.	Winner	Trains Atlantic Cape to Punta del Este yacht race		1982
34.	State Presidents Award	South African Sport Merit Award for Sailing		1982
35.	Tony Williams Short Award	Outstanding Contribution to the promotion of the Western Cape and the communication of its rich historic heritage	29 October	1982
	Honorary degrees			
	D ARCH (HC) University of the Orange Free State			1991
	D Phil (HC) University of Stellenbosch			1993



13.4 APPENDIX D

Nomination letters for Fagan's honorary membership of the American Institute of Architects

Columbia University

IN THE CITY OF NEW YORK
THE GRADUATE SCHOOL OF ARCHITECTURE PLANNING AND PRESERVATION
400 AVERY HALL

Harold Adams, FAIA, RIBA Chair
2008 Jury of Honorary Fellows
The American Institute of Architects
1735 New York Avenue, NW
Washington, DC 20006-5292

September 12, 2007

Re: The Award of AIA Honorary Fellowship to the South African Architect Gabriel Fagan

Dear Harold Adams:

The recipient of the Gold Medal of the South African Institute of Architects in 1988, Gabriel Fagan, is a much honored architect who has cultivated a unique and exceptionally independent form of regional expression that, in its spatial and structural aspects, is as organic as it is tectonic. This particular syntax was first formulated by Fagan in 1950, in the final year of his studies when he designed the proverbial "parent's house" which then as now is often the debut of young architects. Subtly influenced by Le Corbusier's Errazuris project of 1931, Fagan carried this hybrid syntax further in 1965, in a self-built house for his family, roofed by a syncopated sinusoidal concrete shell roof recalling the counterpoint of the hyperbolic vaults covering Antonio Gaudi's Sagrada Familia School of 1924. Fagan will eventually carry this plastic vaulted manner further in his single storey Paradise Beach House of 2002 which, partially sunken into the slope of a sand dune, attains an unexpected synthesis between the white plastered tradition of the Cape and the plasticity of the Mediterranean vernacular.

Notwithstanding his commitment to modernity Fagan has been intensely occupied throughout his career with historic preservation beginning with his restoration of an entire Dutch gabled street in the seismically destroyed Afrikaans town of Tulbagh dating from 1969. He followed this with two equally successful restorations: the Boschendal Homestead (1973-76) and the Castle of the Cape of Good Hope, the latter being worked on for over thirty years between 1969 and 2001. Over the long haul, Fagan was able to integrate his restoration syntax into a totally unprecedented regionally inflected domesticity, composed of thatched roofs and white brickwork.

It is difficult to do justice to the enormous range of Fagan's career. Suffice to say that he has traced an extremely eclectic trajectory, passing from one language to another, with consummate ease. This has run the full gamut from an Afrikaans modernity bordering on pastiche to the hi-tech spectacular idiom that he recently inserted into traditional pitched roof fabric of Cape Town University. Fagan may be seen as a long time exponent of a flexible "other" modernity whose formal recognition in the US is long overdue.

Yours Sincerely,

Kenneth Frampton
Ware Professor of Architecture
Columbia University

NEW YORK, NEW YORK 10027
TEL: 212-854-3414
FAX: 212-864-0410
1172 AMSTERDAM AVENUE



AIA

Wendell Burnette

Architects

5050 North Central Avenue
Phoenix, Arizona 85012
t.602.395.1091
f.602.395.0839

30 September 2007

Harold Adams, FAIA, RIBA, Chair
2008 Jury of Honorary Fellows
The American Institute of Architects
1735 New York Avenue, NW
Washington, DC 20006-5292

Re: Gabriel Fagan's Nomination

Mr. Adams, it is with great conviction that I submit my letter of support for Gabriel Fagan's nomination for honorary fellowship in the American Institute of Architects. I became aware of Gabriel's work as I traveled to speak in Bloemfontein, South Africa late in the summer of 2002, at the invitation of architect Peter Rich. Juhani Pallasmaa, the eminent architectural critic from Finland had whispered in the ear of my friend and fellow architect, Rick Joy that we should not miss the chance to visit Fagan's work first hand. It turned out that Gabriel's own house, *Die Es*, would become the first place we would lay our tired heads to sleep when we arrived from America on the southern tip of the great continent of Africa. Published images devoid of any understanding of this proud country can't prepare you for the sheer genius and the immense global relevance of this one architect's work. His passion for his country, its long history, and its future is exemplified by a lifetime of community service as an architect of immense talent, extraordinary range, and a profound sense of humanity. To be in some of the spaces he has crafted and detailed, one is deeply touched and inspired by the capacity of architecture to enrich our experience of the world; when it is born out of 'place' without pretension, is effortlessly direct, and sincere in its intentions.

This all after a long day with Gabriel and his wife Gwen visiting some of his early houses, the *Klein Constantia Winery*, the *Chavonnes Battery Museum*, and his *Cape Town Atelier* where we discovered more about his work and process. There we heard stories about the planes and sailboats he designed, built and manned, as well as plans for a future *Holiday House*, the idea and its siting precisely explained with the most wonderfully small miniature model. Three showers animated the elevation facing the sea; the vintage bronze 'ship-porthole' windows for which they were designed around already laying against the atelier walls. We were invited to pick them up and I remember their perfect operation was simply a pleasure. Later the next day, we traveled through the infamous Stellenbosch Wine region north of Cape Town, where we had lunch at the meticulously restored *Boschendal Homestead*. Here we glimpsed into what it means to assimilate one's own direct experiences into a deeply personal and original architectural language that is inimitable. Lastly, I heard Gabriel present his life work, the patient 22-year restoration of *The Castle of Good Hope* for which he won a *South African Institute of Architects Award of Excellence*.

One lasting memory worth imparting is from that first night at *Die Es*. After dinner we found ourselves; all seven of us sitting within this enormous fireplace, years of black soot caked and streaking prominently up the back wall, fire sparks swirling up through the flue above our heads into the night-black sky, the brand new sounds of the Angolan singer Waldemar Bastos hovering in the silence between the crackling fire and the conversation of a newly found friendship. I have had the privilege of experiencing many of the great houses of the world that we all hold in high esteem and I can unequivocally place *Die Es* as one of the ten best. Gabriel Fagan is without question one of South Africa's greatest living architects, but additionally I would add that he is one of the world's few yet unknown 'great architects' and international praise for his work is long overdue.

Sincerely Yours,

Wendell Burnette
AIA

info@wendellburnettearchitects.com



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617-
253-4401

October 5, 2007

Harold Adams, FAIA, RIBA, Chair
2008 Jury of Honorary Fellows
The American Institute of Architects
1735 New York Avenue, NW
Washington, DC 20006-5292

Dear Mr. Adams,

Gabriel Fagan is considered one of South Africa's finest architects in several domains. He has garnered the most awards and distinctions from the Institute of South African Architects in its 80 year history, receiving the coveted Gold Medal in 1988. Although much acclaimed in his country the work has only recently been widely published internationally. As a South African by birth, and having visited many of his wonderful buildings, I believe that he deserves a wider level of recognition for an astonishing body of work in a highly productive career. I agreed to be the Sponsor for his nomination for an AIA Honorary Fellowship because I believe that this distinction is well deserved.

He is unquestionably the pre-eminent architect in Historic Restoration with over 300 projects to date. He is known to be a meticulous researcher with deep knowledge of both historic and vernacular buildings and their building technologies. The restoration of the town of Tulbach, devastated by an earthquake, was a major early achievement and a great contribution to saving our priceless heritage. Other prominent commissions were to follow including The Castle of Good Hope, a major national icon. This complex process of restoration took over thirty years of painstaking work.

His work in adaptive reuse has been equally significant. As a modern architect with great respect for history he has been ingenious and creative in restoring structures while adapting them for modern uses. In this regard the SA Breweries Museum and the Dias Museum Complex stand out.

Parallel to all this work in restoration Fagan has produced numerous buildings of great distinction. His knowledge of the history and architectural traditions of the Cape in particular, coupled with his modernist training enabled him to develop a distinctive architectural language informed by its context. Often described as a regionalist modern architecture, it is timeless and durable, spatially rich, elegant and beautiful, and still feels inventive many decades after it was conceived. All the work is sensitive to site micro-climate and to local building traditions. For example the much praised early house Die Es of 1965, built by hand by his family, was conceived to be energy efficient four decades before "green" architecture was in vogue. He has continued to set an example by employing passive environmental control systems in his work such as the Klein Constantia Wine Cellar. His buildings are technologically clever and beautifully detailed and crafted, not surprisingly given that he has also designed and built boats and aircraft to add further complexity to his list of achievements.

His work as an architect in South Africa has been recognized nationally by the profession. He has also been rewarded for his wider cultural contributions to society. He is the recipient of two Honorary Doctorates from South African Universities and two Gold Medals from the Academy of Arts and Science and the South African Government for Meritorious Service. Recognition of his contribution to the profession of architecture by the AIA after 57 years of a distinguished practice would seem appropriate. I strongly recommend that Gabriel Fagan be made an AIA Honorary Fellow.

Sincerely,

Adèle Naudé Santos, FAIA
Dean
Professor of Architecture and Planning



Yello Hill

TOD WILLIAMS
BILLIE TSIEN

September 9, 2007

To the Members of 2008 Honorary FAIA Jury
Re: Gabriel Fagan's nomination

It is a great honor to be asked to write this letter in support of Gabriel Fagan's nomination for honorary Fellowship into the AIA.

I had only the most distant ideas about South Africa until I visited last year. One knows of the beauty, riches, the problems, the potential...as architects we know of many excellent practitioners who have fled, many of whom contribute to our own architectural heritage. I had heard of Fagan, knew a project or two by publication, had heard that at 80 he and his son had skippered his own hand made boat across the Atlantic ...and then Billie and I visited. Gabriel Fagan *is* the father of modern architecture in South Africa. Of course we were astonished...much as first time visitors are with the myths of America. Gabriel the youngest octogenarian one can imagine, his wife Gwen and their small studio define what is great about South Africa and what is great about architecture.

Images do not begin to convey first hand experience. Gabriel's architectural range is astonishing. Billie and I visited a number of projects that varied in time, program and size. We spent several hours in his own amazing hand built home and we visited the great restored site and winery of Boschendal. Later, among other projects, we visited the Cape Hope entrance gate and the restored South African Breweries Visitor Center. I suspect it is nearly impossible to find architects anywhere who have created such varied projects with this passion and clarity. Each project's design is committed to the search for truth and beauty, a project suited to site, climate and context that is constructed with a profound appreciation for craft and the art of building. Fagan's architecture has spoken for decades. While it is born of the past, it addresses the present. This is architecture of good will and great promise.

Sincerely yours, Tod Williams FAIA

f 212.245.1984
mail@twbia.com



Rick Joy Architects

October 9, 2007

Harold Adams, FAIA, RIBA, Chair
2008 Jury of Honorary Fellows
The American Institute of Architects
1735 New York Avenue, NW
Washington, DC 20006-5292

Subject: The award of AIA Fellowship to the South African Premier Architect
Gabriel Fagan

Dear Mr. Adams,

It is with great pleasure that I write this letter of support for the nomination of Mr. Gabriel Fagan for his indoctrination into the American Institute of Architects as an international honorary fellow. Herein, I offer my strongest possible support.

Some years ago I had the opportunity to visit Gabriel and his wife Gwen, tour a number of his projects and stay for some days in their family home in Cape Town South Africa. From this perspective, I believe Gabriel to be, without a doubt, one of the very top few most inspired Architects alive today. His interest in how nature and natural phenomena can inform his architecture and the lifestyles, for whom he builds, has by example bolstered my own interests in these kinds of inspirations. As I reach to higher realms in my own work, I often think first of what would Gabriel [and a very select few others] think first - rather than my peers. As I left Gabriel and Gwen in South Africa, I was struck with the feeling that I don't work hard enough by comparison and for these reasons, Gabriel will remain present as part of my conscience for ever.











I believe Mr. Fagan is highly deserving of the great honor of Honorary Fellow in the American Institute of Architects. Further, I believe he sets a good level for the rest of us in the AIA by the example of his exemplary work. His work encourages us all to strive for a higher ideal in our profession.







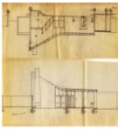
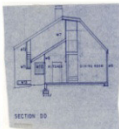





With great enthusiastic support,

Rick Joy, AIA

13.5 APPENDIX E

DOMESTIC ARCHITECTURE PROJECT LIST SUMMARY

DATE	1951	1963	1965	1965	1965
PROJECT	KEURBOS Santorini	LANGELUK	BERTIE-ROBERTS	DIE ES	SKAAPRIVIERPLAAS
PROJECT No.			644	656	653
LOCATION	CLAREMONT	KAMEELDRIFT, PRETORIA	CAMPS BAY	CAMPS BAY	KOUE BOKKEVELD
IMAGE					
SKETCH					

DATE	1966	1967	1969/1970	1972	1975	1977	1980
PROJECT	PATTERSON	RAYNHAM	LEVIN	GARDINER	IDA'S VALLEY HOUSING	GIE	SWANEPOEL
PROJECT No.	655	673	6910	7203	7503	7707	8011
LOCATION	SOMERSET WEST	NEWLANDS	SALDANHA	CAMPS BAY	STELLENBOSCH		CAPE ST. FRANCIS
IMAGE							
SKETCH							








DATE	1981	1982	1983	1984	1990
PROJECT	LUCKHOFF	BLOMMAERT	NEETHLING	OUDEBAASKRAAL	SWANEPOEL
PROJECT No.	8101	8204	8205	8312	9021
LOCATION	ONRUST	STELLENBOSCH	DURBANVILLE	TANQUA-KAROO	HERMANUS
IMAGE				Not constructed	

SKETCH					
---------------	--	--	--	--	--

DATE	1992	1998	2002	2003	2004
PROJECT	AULDEARN	NAGENOEG	BRINK	PARADYS	PATERNOSTER
PROJECT No.	9303	9814	0206	0205	0405
LOCATION	ELGIN	BETTY'S BAY	LANGEBAAAN	LANGEBAAAN	PATERNOSTER
IMAGE					

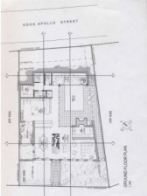

SKETCH					
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DATE	2005	2005-2008	2007	2010	2010
PROJECT	MITCHELL	FAGAN	VAN ZYL	ROUND HOUSE ECO LODGE	STRONG
PROJECT No.	0503	0508	0702	1002	1014
LOCATION	NEWLANDS	MACGREGOR	SWELLENDAM	CAMPS BAY	BAKOVEN
IMAGE					

SKETCH					
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DATE	2011	2011
PROJECT	VISSER	VAN DER LINDE
PROJECT No.	1102	1104
LOCATION	LANGEBAAAN	MOSEL BAY

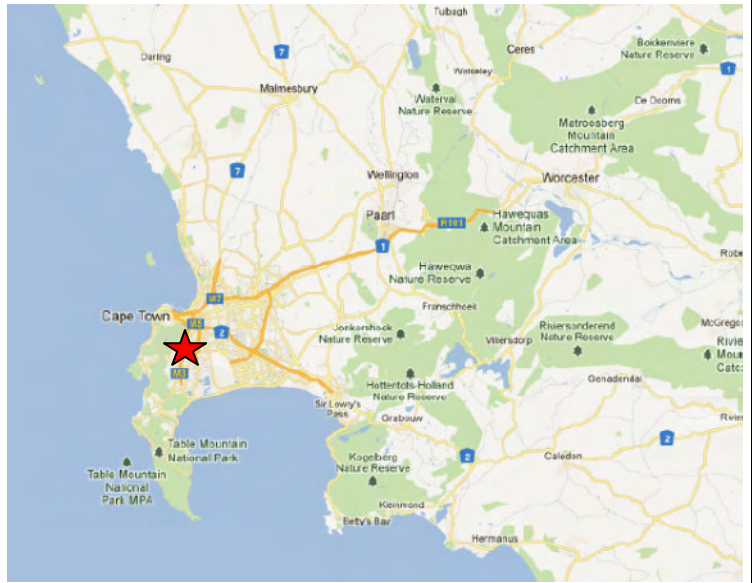
IMAGE		
		
		

SKETCH		
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13.6 APPENDIX F

DATA SHEETS OF BUILDINGS

13.6.1: HOUSE KEURBOS



Map of the Western Cape. Red star indicates location of house (<http://maps.google.co.za/> Accessed 25/04/2012 and amended by author).



JOB NUMBER	None pre 1960's
Slide Collection	CS
PROJECT	House for parents
PROJECT TYPE	Residential
LOCATION	Latitude: -33.993665° Longitude: 18.444567° Upper Primrose Street, Bishopscourt, Cape Town.
YEAR	1951
CLIENT	Justice and Mrs. Fagan (Fagan's parents)
COST	unknown
AWARD	None
REFERENCES	Casa de Arbitare 2004. Home, July 2006.

House and Garden, December 2005.

Huisgenoot, August 1971

Fagan, G.T. 1983b. *Architectural language*. Paper delivered at the ISAA Architectural Congress, University of Cape Town, April 1983. Unpublished, Fagan archive.

Fagan, G.T. c.1975. *Gawie Fagan: Kommentaarteks*. Unpublished lecture, Fagan archive.

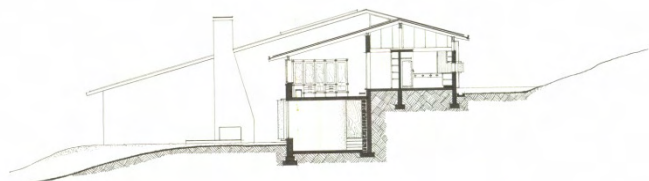
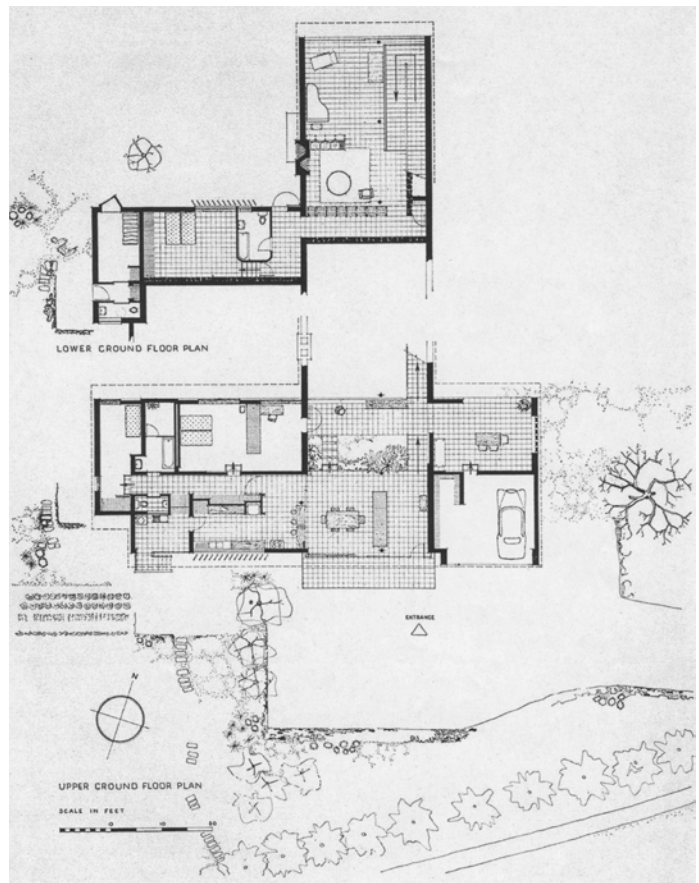
Fagan, G.T. 1985. *Regionalism*. Lecture delivered at Architecture Student's Conference, University of Cape Town, 4 April 1985. Unpublished, Fagan archive.

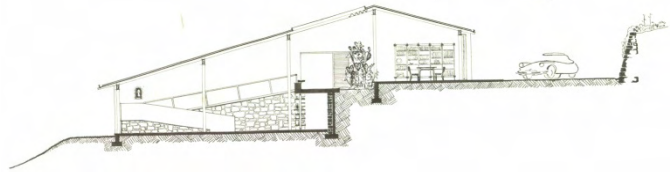
Wale, Laurie (ed.) c.1964. *New Home Building Ideas – Architects' Plans for Southern Africa*. Johannesburg: Purnell & Sons.

Wale, L. (ed). 1959. *Hillside House, Bishopscourt, Cape Town*. Architect and Builder. November:34-39.

DOCUMENTATION

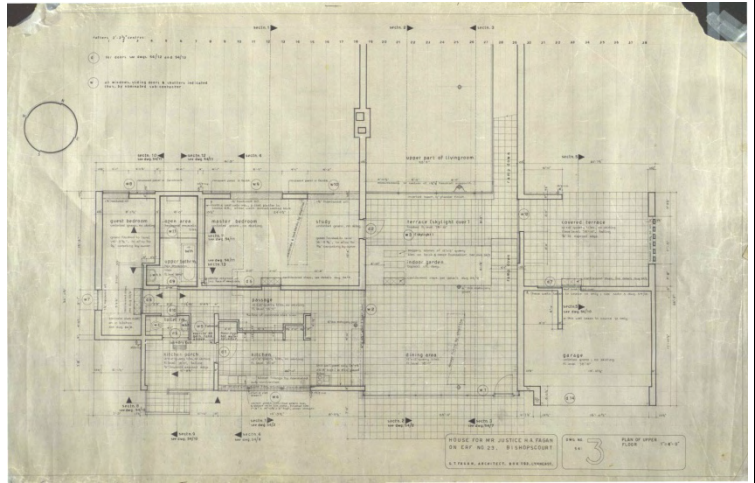
Sketch plans



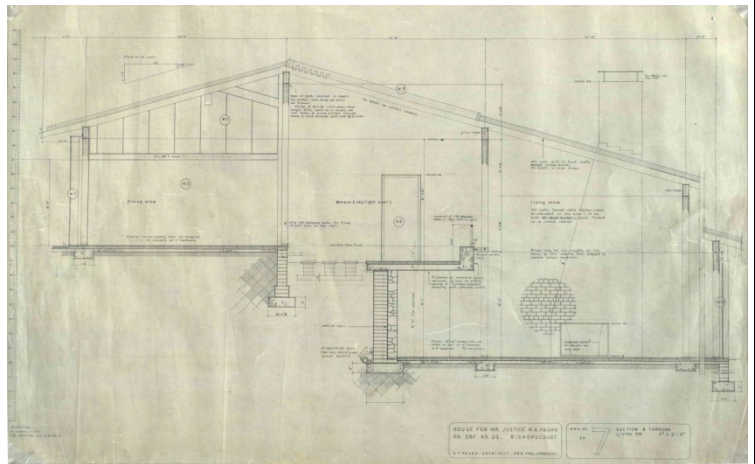


Sketch plans, copies of ink on tracing, undated and unnumbered.

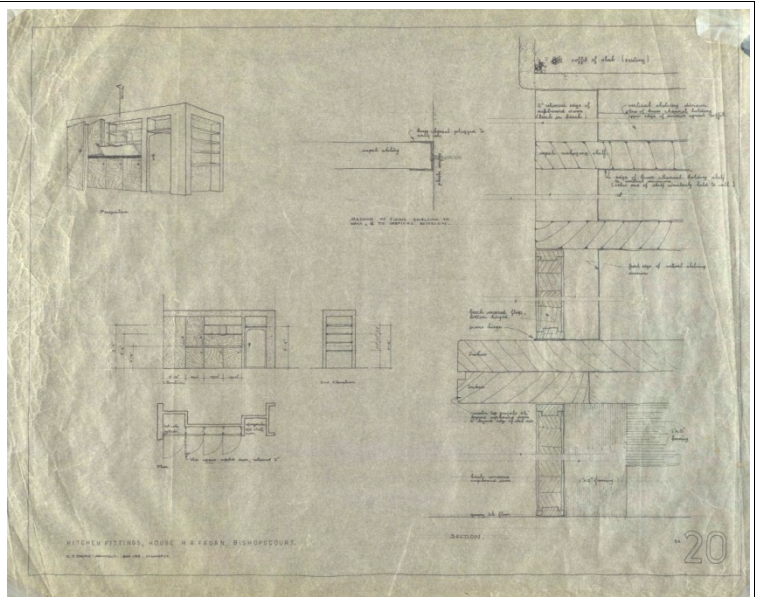
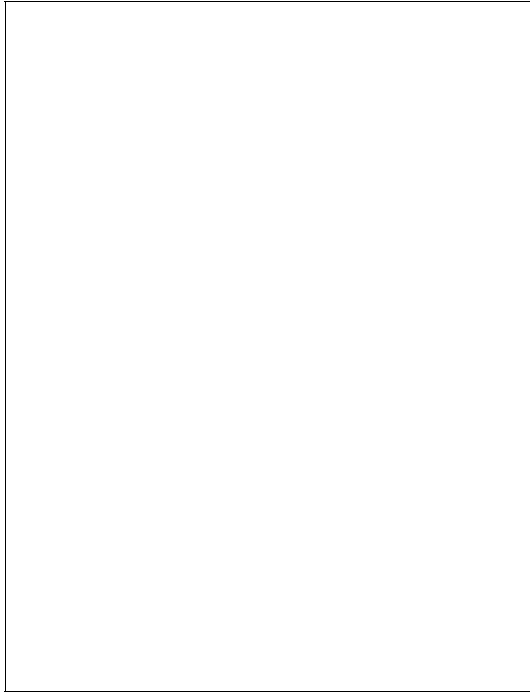
Working drawings



Upper floor plans, ink on tracing, numbered 54 3.



Section, ink on tracing, numbered 54 7.



Hall cupboard, ink on tracing, numbered 54 20.

13.6.2: HOUSE LANGGELUK



(Author, 2008)



Map of the Western Cape. Red star indicates location of house (<http://maps.google.co.za/> Accessed 28/04/2012 and amended by author).

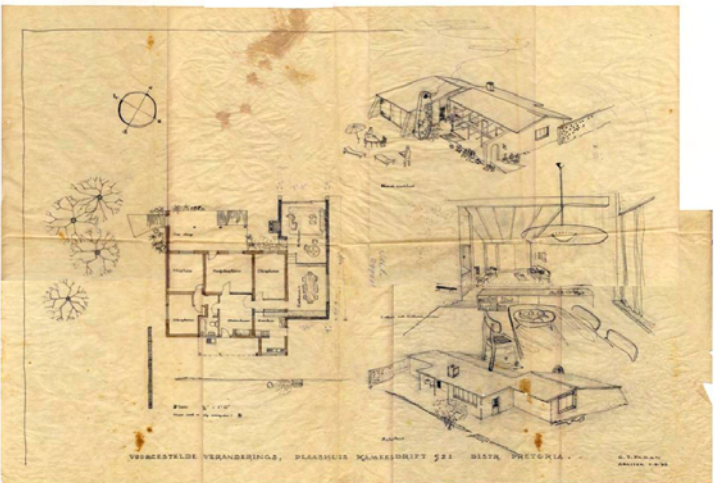


JOB NUMBER

None pre 1960's

PROJECT

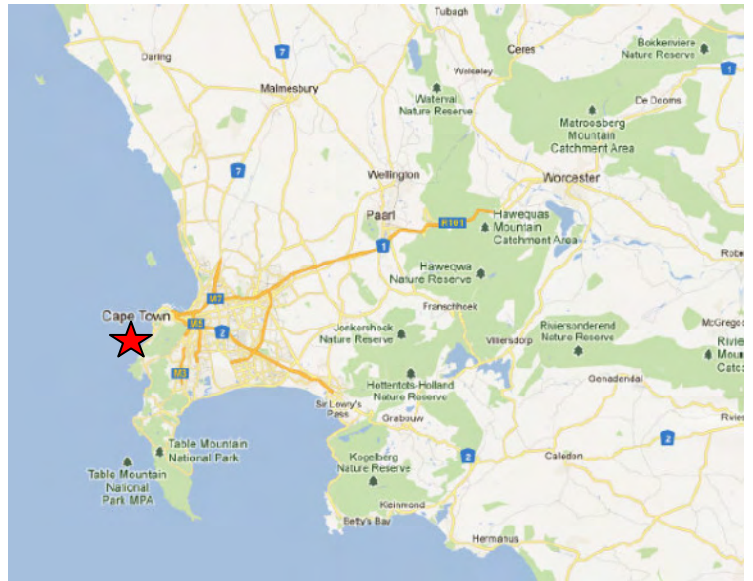
Own house

PROJECT TYPE	Residential
LOCATION	Latitude: -25.651602° Longitude: 28.327422° Kameeldrift, Eastern Pretoria
YEAR	1963
CLIENT	The Fagans
COST	unknown
AWARD	None
REFERENCES	None
DOCUMENTATION	
Sketch plans	 <p>Sketch plans, ink on bumf, 1 August 1963.</p>

13.6.3: HOUSE DIE ES



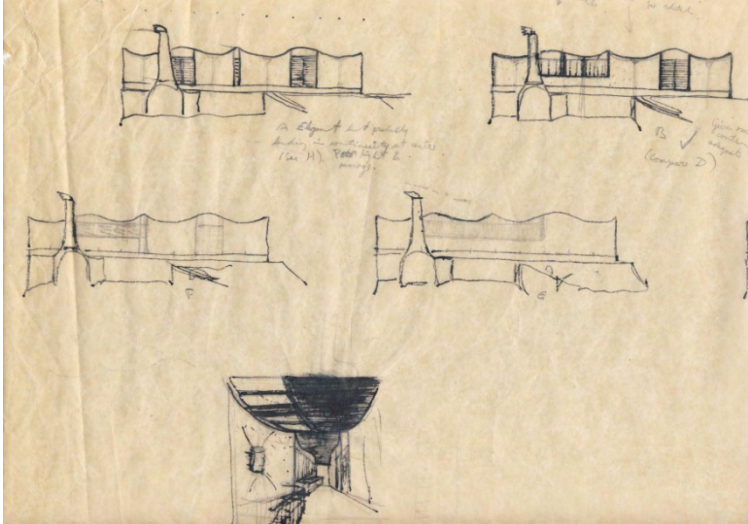
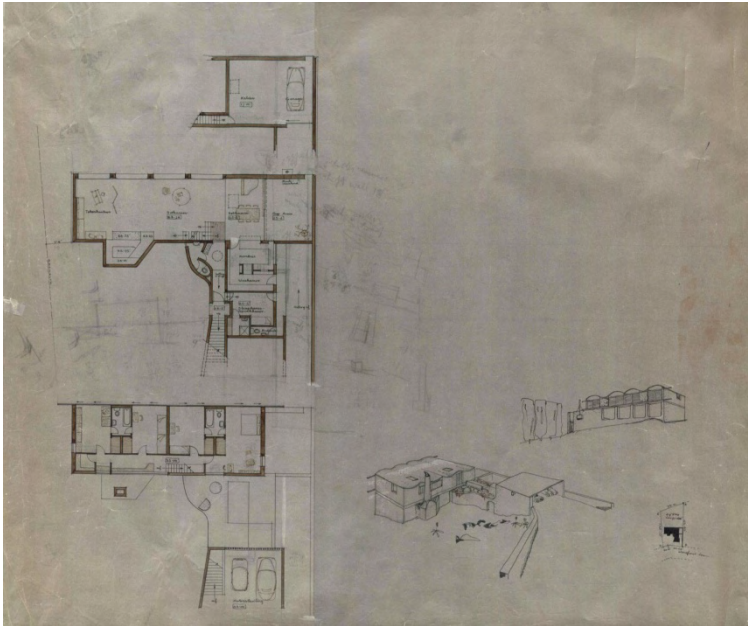
(Author, 2008)



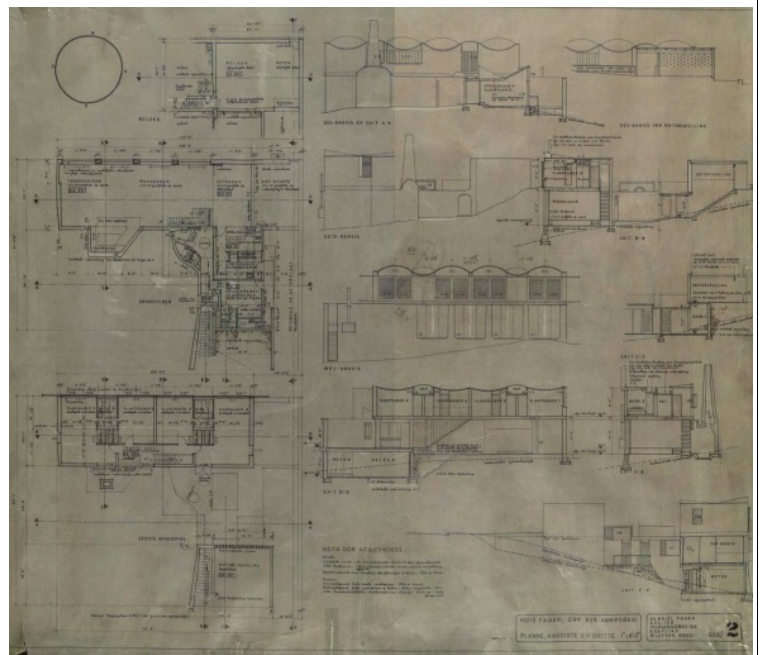
Map of the Western Cape. Red star indicates location of house (<http://maps.google.co.za/> Accessed 25/04/2012 and amended by author).



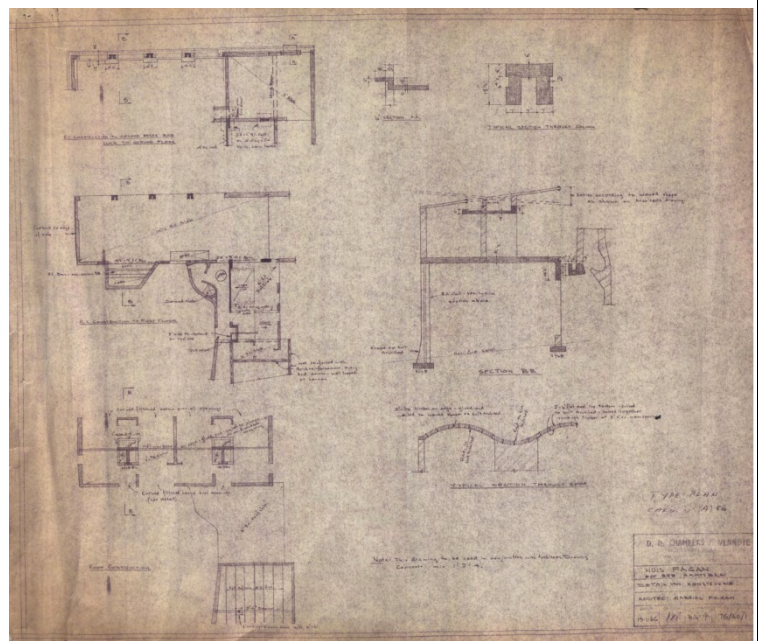
JOB NUMBER	656
Slide Collection	CE
PROJECT	Fagan House
PROJECT TYPE	Residential
LOCATION	Latitude: -33.956436° Longitude: 18.384078° Camps Bay
YEAR	1965 (started 1964 and kitchen drawings 1969)
CLIENT	Mr. and Mrs. Fagan
COST	Unknown
AWARD	None
SOURCES	Beck, H. (ed.). 1985. Architects House, Camps Bay Cape Town. <i>UIA International Architect</i> (8):48-49.

	<p>Fagan, G.T. 2005b, Gabriel Fagan. <i>Twenty Cape Houses</i>. Cape Town: Breestraat Publikasies.</p> <p>Anon, 2007. <i>Houses of the World</i>, Gardner Books.</p> <p>Fagan, G.T. 1983c. Architectural Language. <i>Architecture South Africa</i>. May June:50-51.</p>
DOCUMENTATION	
Conceptual drawings	 <p>Elevations and sketches of roof and inside space, pencil and ink on A2 bumf, undated and unnumbered.</p>
Sketch plans	 <p>Sketch plan ink on A1 tracing undated and unnumbered.</p>

Working drawings



Working drawing 656/2 A -ink on square tracing.

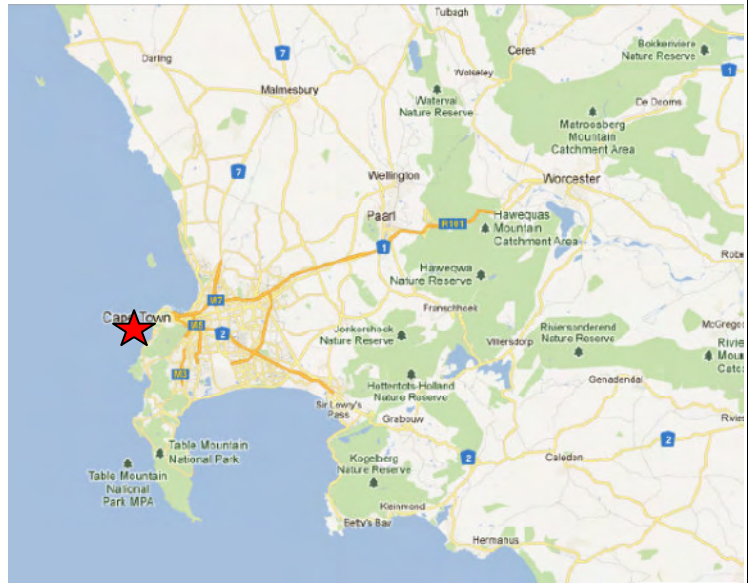


Eng drawing, ammonia print, 76/65/1.

13.6.4: HOUSE BERTIE-ROBERTS



(Fagan archive - Job No. 644, undated)



<http://maps.google.co.za/> Accessed 25/04/2012 and amended by author



JOB NUMBER	644
Slide Collection	Not indicated
PROJECT	House Bertie Roberts
PROJECT TYPE	Residential
LOCATION	Latitude: -33.946260° Longitude: 18.389024° Corner of Athol Road and Dal Avenue, Camps Bay
YEAR	1966
CLIENT	Bertie Roberts
COST	R22000 (tender R18 962)
AWARD	None

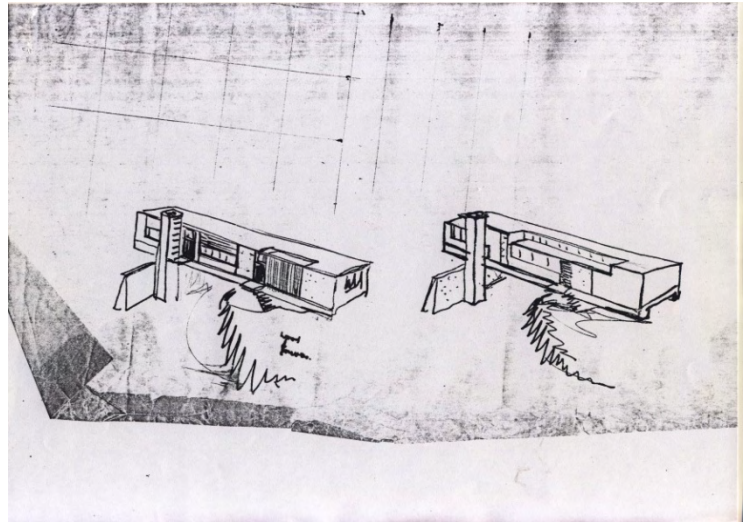
SOURCES

Architect and Builder, January 1968, p10-13.

Fagan, G.T. 2005, *Gabriel Fagan. Twenty Cape Houses*. Cape Town: Breestraat Publikasies.

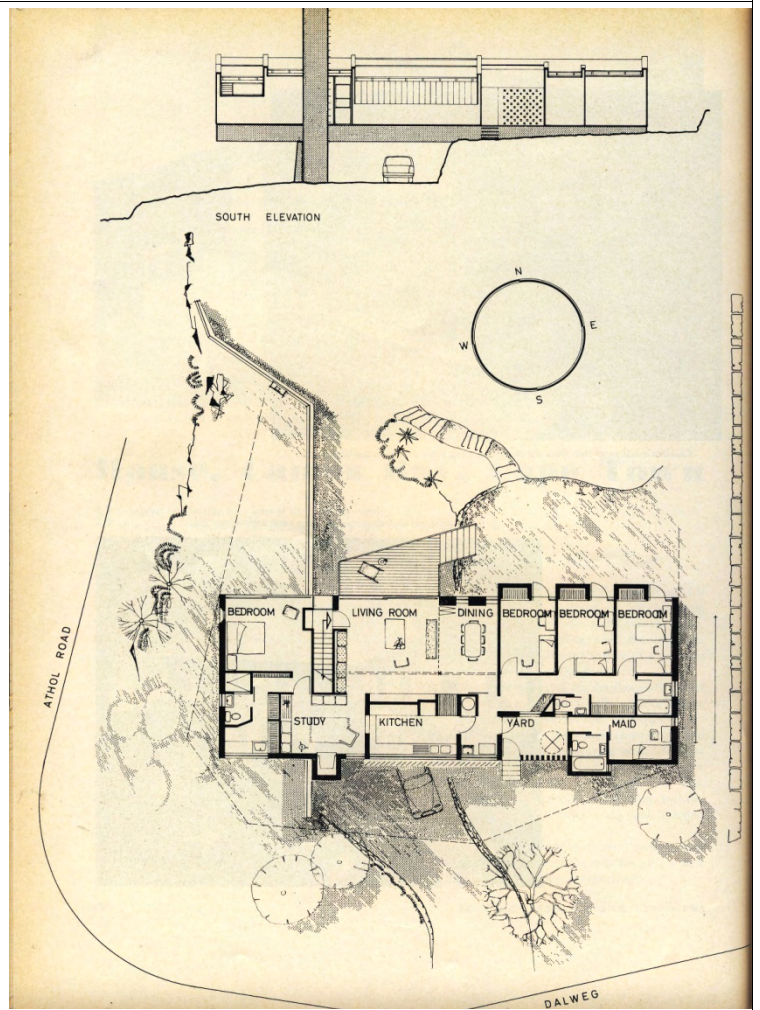
DOCUMENTATION

Conceptual drawings

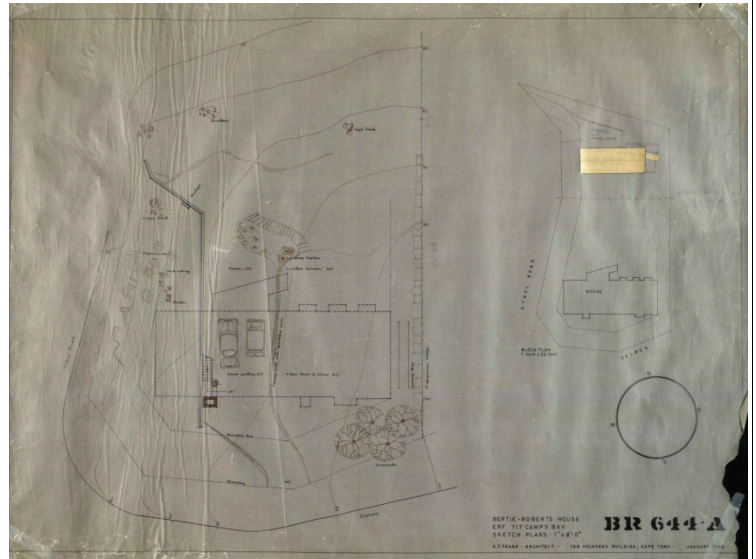


Fagan sketches, undated and unnumbered, photocopy.

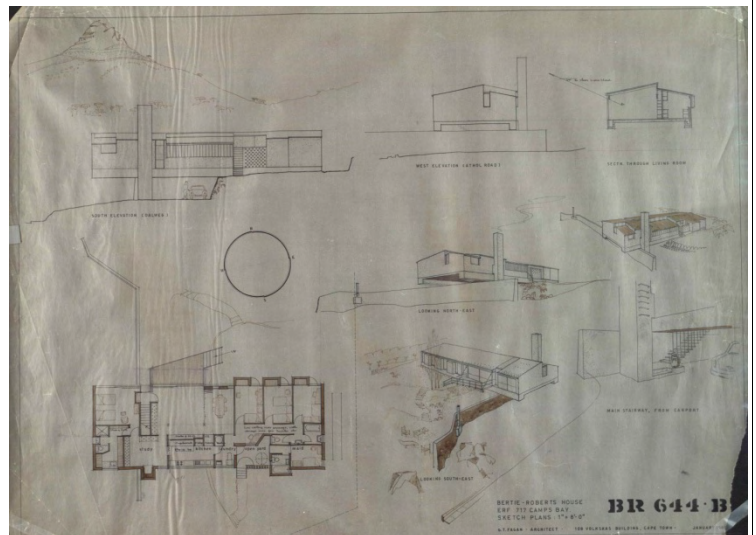
Sketch plans



Architect and Builder, January 1968, 12.

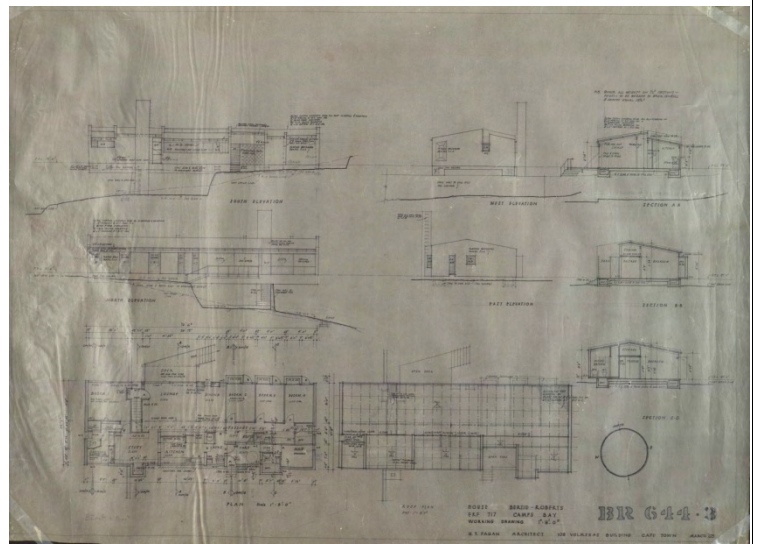


Sketch plans in ink on tracing BR 644-A, January 1965.

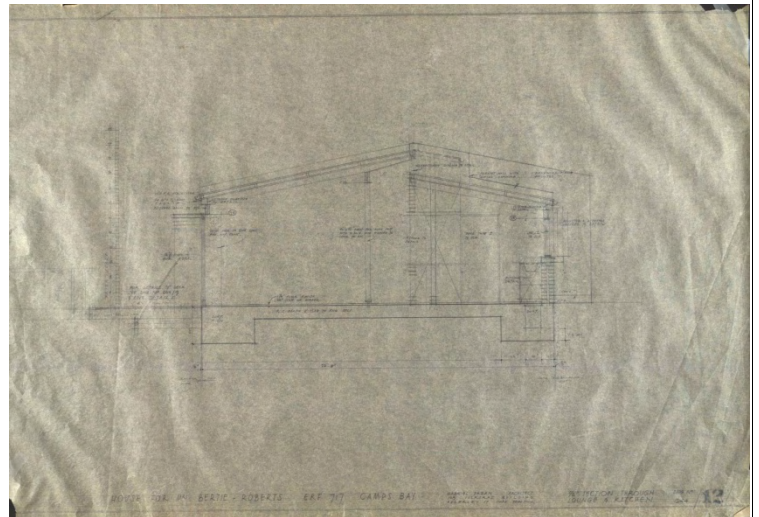


Sketch plans in ink on tracing BR 644-B, January 1965.

Working drawing

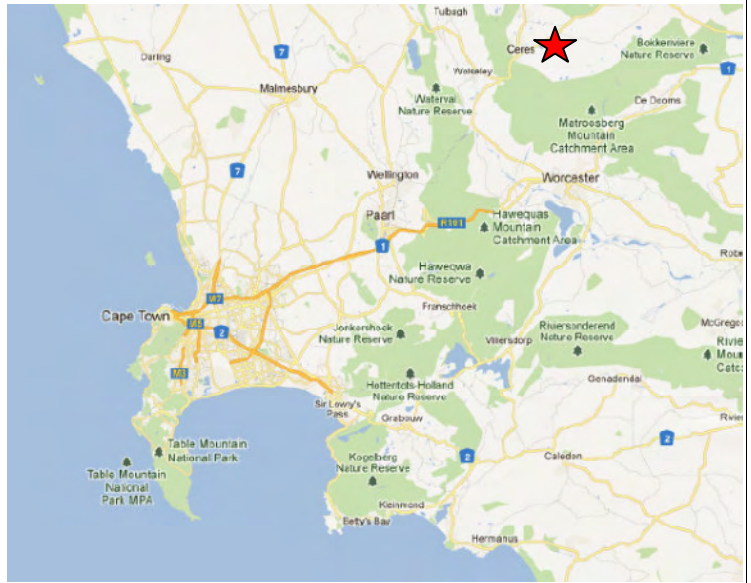


Working drawings – plans, sections, elevations Br 644-3, March 1965.



Section through lounge and kitchen, pencil and ink on bumf, 644-12 undated.

13.6.5: HOUSE SKAAPRIVIERPLAAS

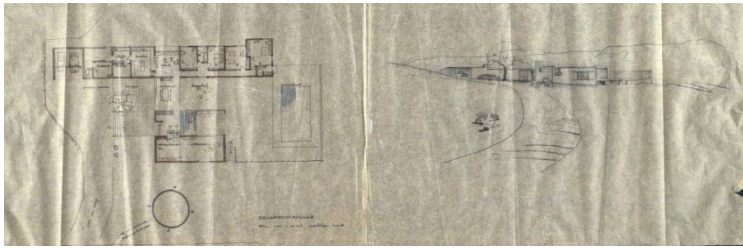
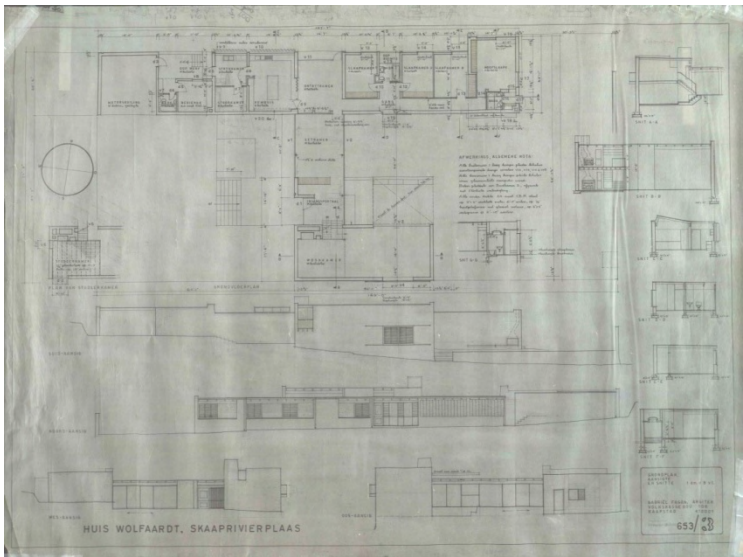
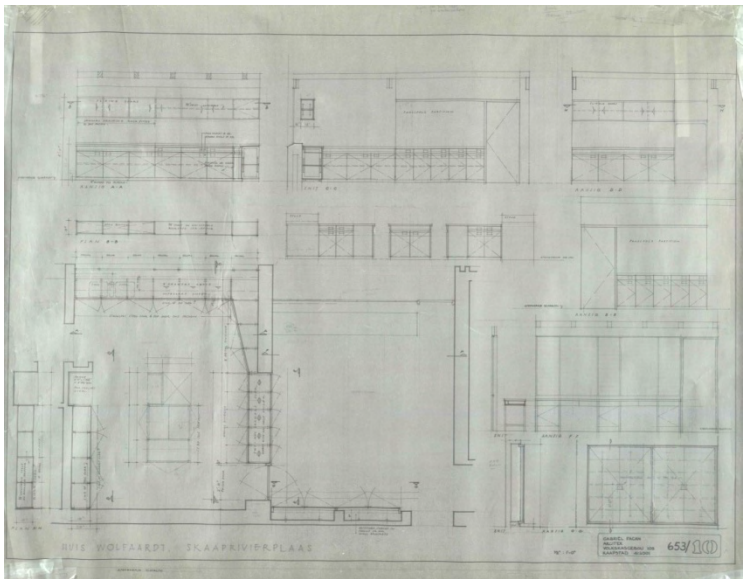


<http://maps.google.co.za/> Accessed 25/04/2012 and amended by author.



(Author, 2009).

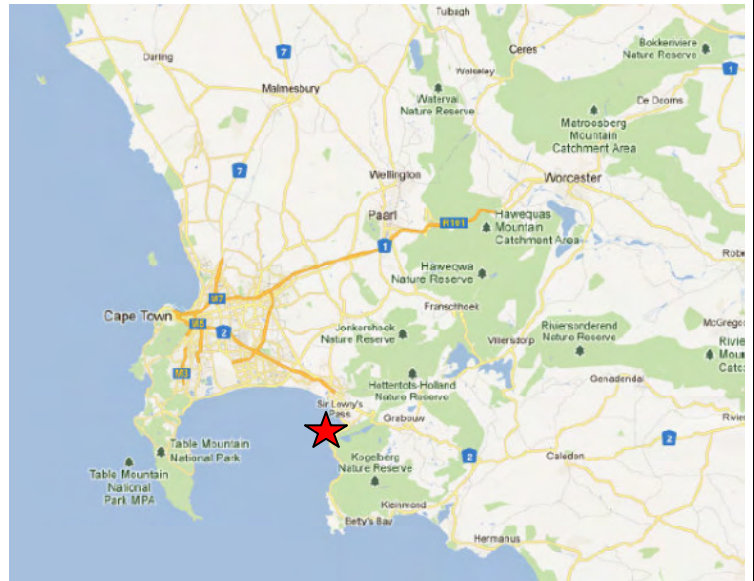
JOB NUMBER	653
PROJECT	Skaaprivierplaas (now called Northridge)
PROJECT TYPE	Residential
LOCATION	Latitude: 33.283333 Longitude: 19.283333 Skaaprivier lies about 16km NE of Ceres off the Ceres-Sutherland road in the Koue Bokkeveld
YEAR	1965
CLIENT	JS Wolfaardt
COST	R
AWARD	None
PUBLICATION/s	Fagan, G.T. 2005b, <i>Gabriel Fagan. Twenty Cape Houses.</i> Cape Town: Breestraat Publikasies.

<p>DOCUMENTATION</p> <p>Sketch plans</p> <p>Working drawings</p>	 <p>Plan and approach view, sketches in ink on bumf, June 1965, unnumbered.</p>  <p>Plans, sections and elevations, ink on tracing, Drwg. No. 653/3.</p>  <p>Kitchen cupboards, ink on tracing, Drwg. No. 653/10.</p>
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13.6.6: HOUSE PATTERSON



(Author, 2009)



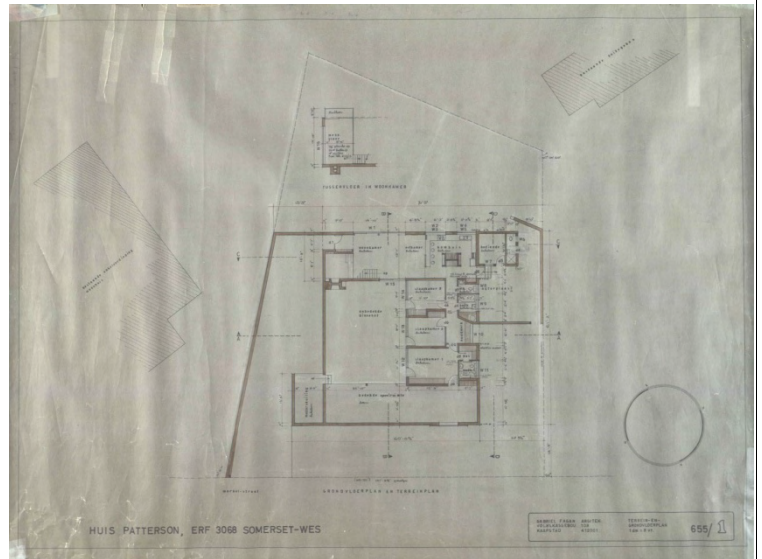
Map of the Western Cape. Red star indicates location of house (<http://maps.google.co.za/> Accessed 25/04/2012 and amended by author).



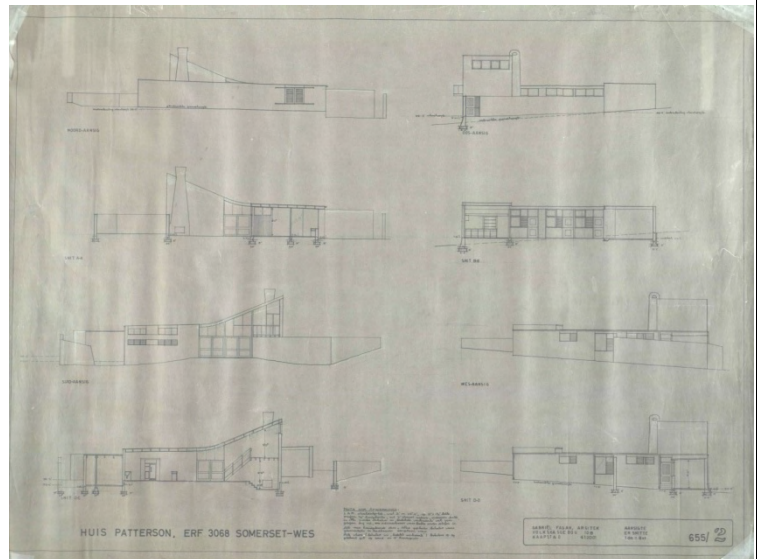
JOB NUMBER	655
PROJECT	House Patterson
PROJECT TYPE	Residential
LOCATION	Latitude: -34.078909° Longitude: 18.854734° 30 Morkel Street, Somerset West
YEAR	1966
CLIENT	Patterson - owner builder (owner now Mr. Dixon)
COST	R12500
AWARD	None
SOURCES	Fagan, G.T. 2005b, <i>Gabriel Fagan. Twenty Cape Houses.</i> Cape Town: Breestraat Publikasies.

DOCUMENTATION

Sketch plans

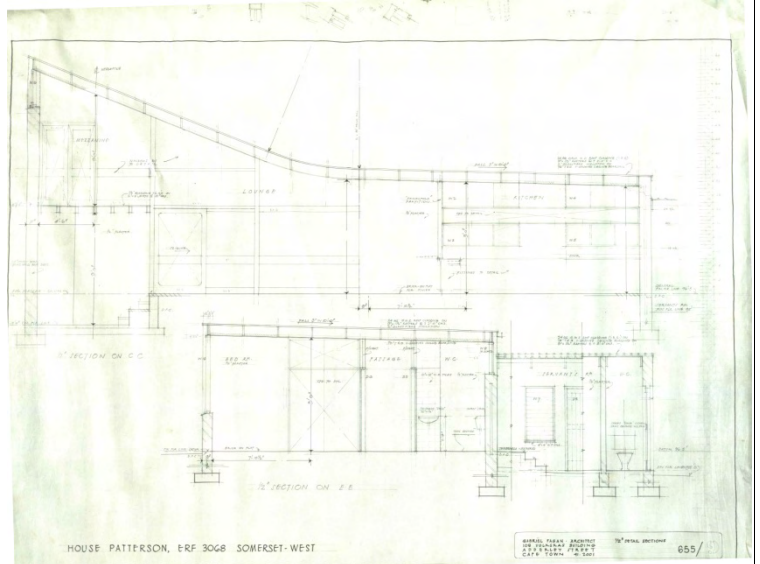


Sketch plans, ink on tracing, Drwg. No. 655/1.



Sketch elevations, ink on tracing, Drwg. No. 655/2.

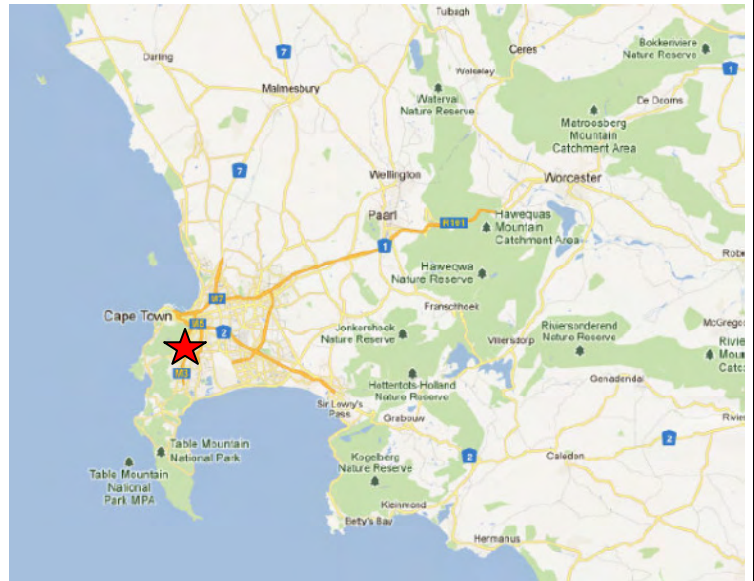
Working drawings



13.6.7: HOUSE RAYNHAM



(Author, 2007)



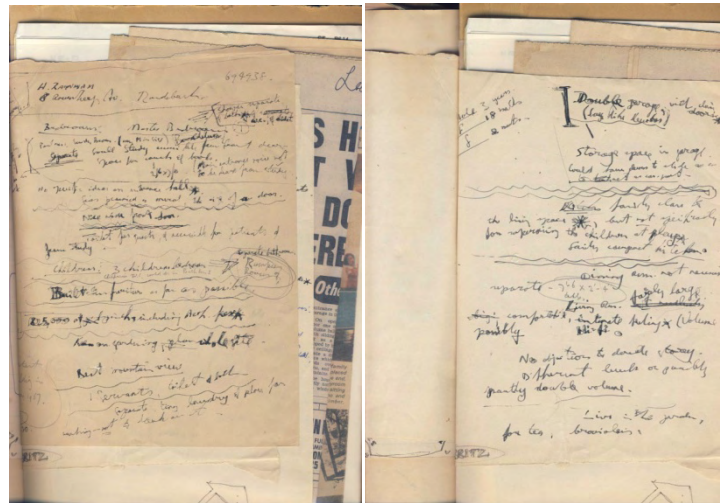
Map of the Western Cape. Red star indicates location of house (<http://maps.google.co.za/> Accessed 25/04/2012 and amended by author).



JOB NUMBER	695
Slide Collection	FK
PROJECT	House Raynham
PROJECT TYPE	Residential and business
LOCATION	Latitude: -33.980341° Longitude: 18.447765° 16 Boshoff Avenue, Newlands
YEAR	1967
CLIENT	Dr. and Mrs. Raynham
COST	R43 319.90
AWARD	None
PUBLICATION/s	Fagan, G.T. 2005b, <i>Gabriel Fagan. Twenty Cape Houses.</i> Cape Town: Breestraat Publikasies.

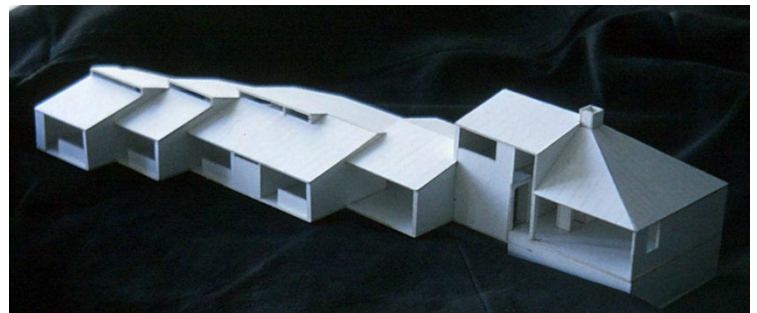
DOCUMENTATION

Client requirements

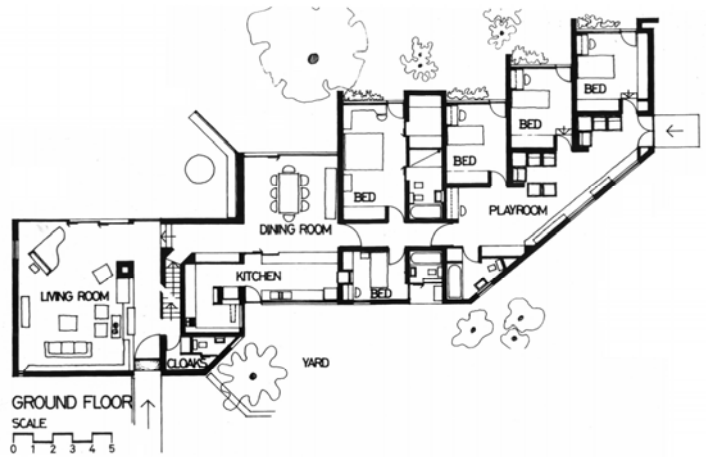


Client requirements as written by Fagan.

Sketch plans

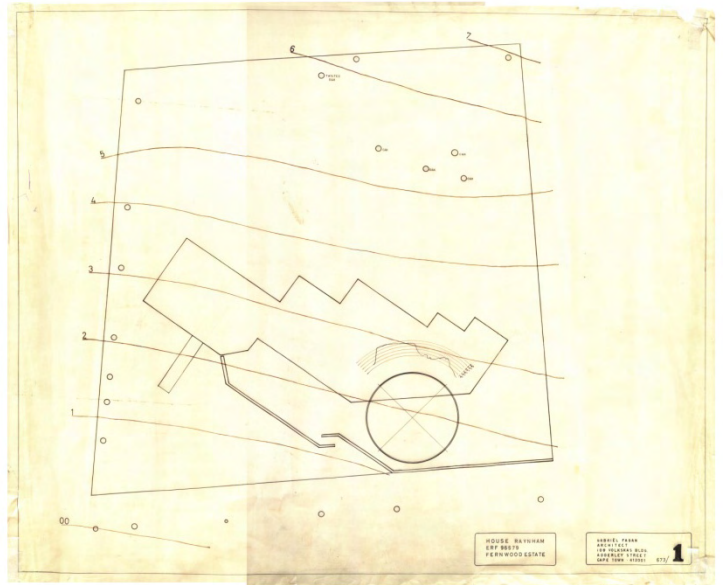


White cardboard model as built by John Rennie (John Rennie archive).

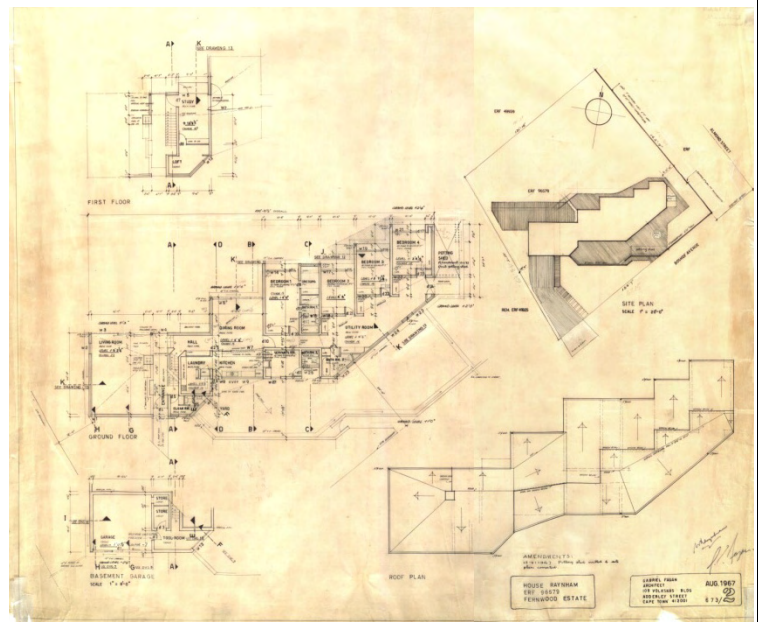


Ground floor plan. Unnumbered and undated.

Working drawings



Site plan and theodolite drawing, ink on tracing, 673/1, undated.

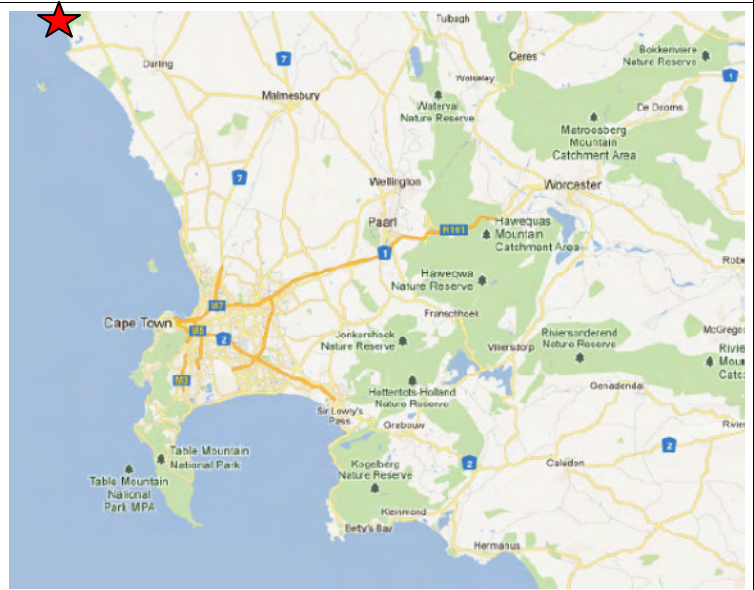


Plan, site and roof plans, ink on tracing, 673/2 dated August 1967.

13.6.8: HOUSE LEVIN



(Author, 2009)

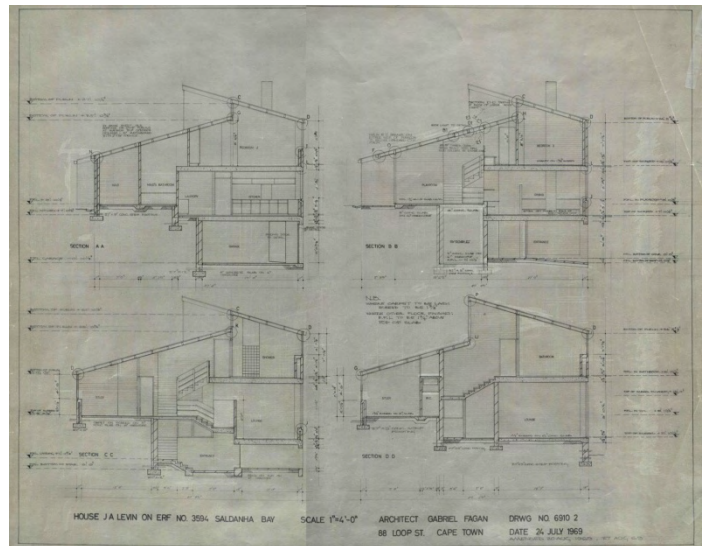


Map of the Western Cape. Red star indicates location of house (here slightly off map to the north)

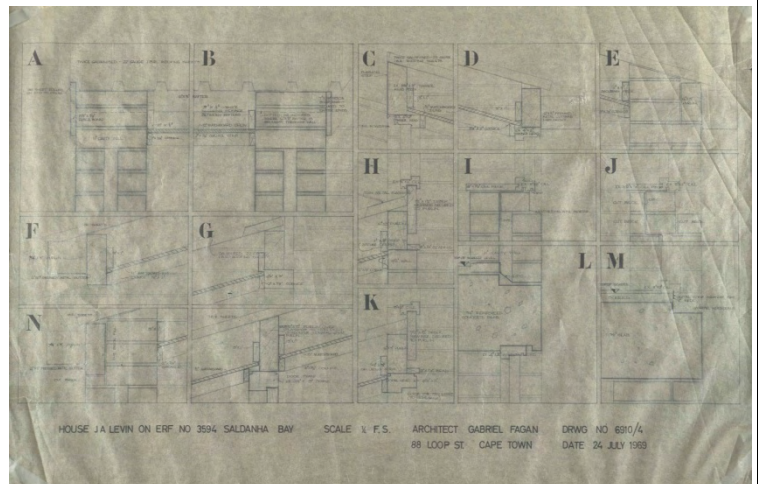
(<http://maps.google.co.za/> Accessed 25/04/2012 and amended by author).



JOB NUMBER	6910
Slide Collection	DJ
PROJECT	House Levin
PROJECT TYPE	Residential
LOCATION	Strand Street, Saldanha Bay Latitude: -33.002458° Longitude 17.949292°
YEAR	1969/1970
CLIENT	Dr. D.J. Levin
COST	R23 410
AWARD	None
PUBLICATION/s	None



Sections 1:50, ink on tracing, Drwg. No. 6910/2, 24 July 1969.

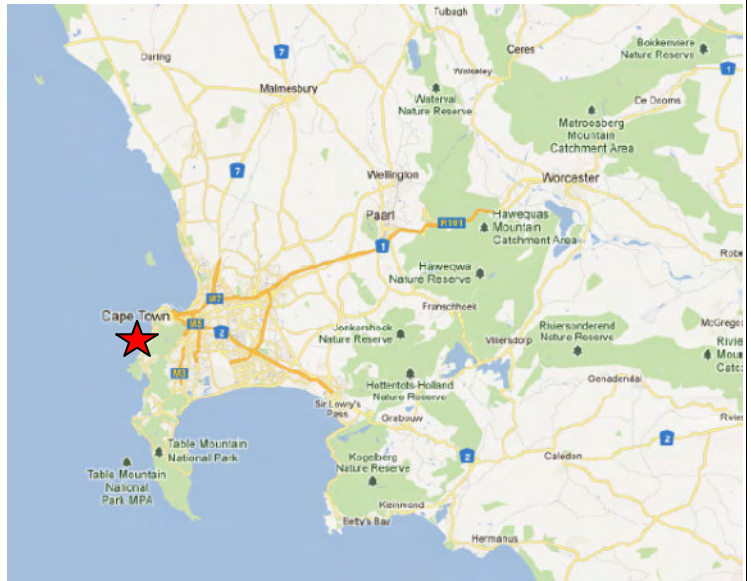


Construction details, pencil on bumf, Drwg. No. 6910/4, 24 July 1969.

13.6.9: HOUSE GARDINER



(Author, 2012)



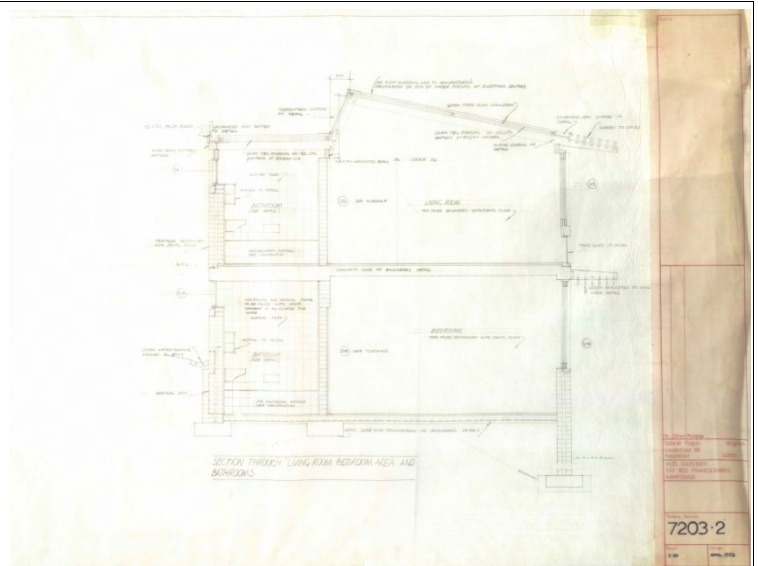
Map of the Western Cape. Red star indicates location of house
(<http://maps.google.co.za/> Accessed 25/04/2012 and amended by author).



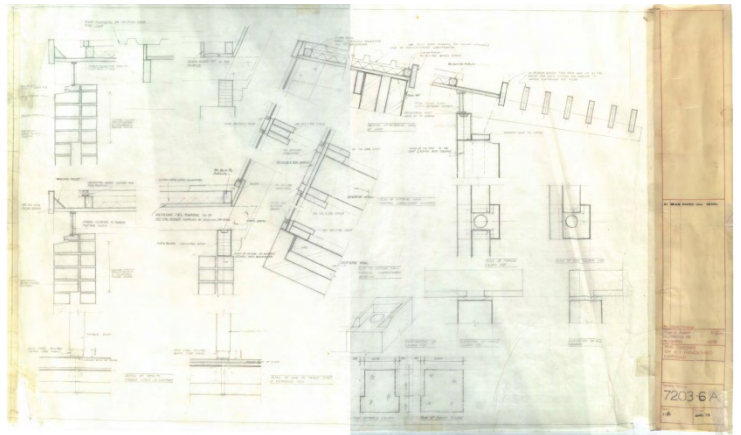
JOB NUMBER	7203
PROJECT	House Gardiner
PROJECT TYPE	Residential
LOCATION	Latitude: -33.959629° Longitude: 18.385393° Francolin Road, Camps Bay
YEAR	1972
CLIENT	Taffie Gardiner
COST	R36 960-00
AWARD	None

<p>PUBLICATION/s</p>	<p>None</p>
<p>DOCUMENTATION</p>	
<p>Sketch plans</p>	<p>Sketch plan. Drwg No. 2, Ink on film. 10 August 1972.</p> <p>Sketch plan. Drwg No. 1, Ink on film. 10 August 1972.</p>

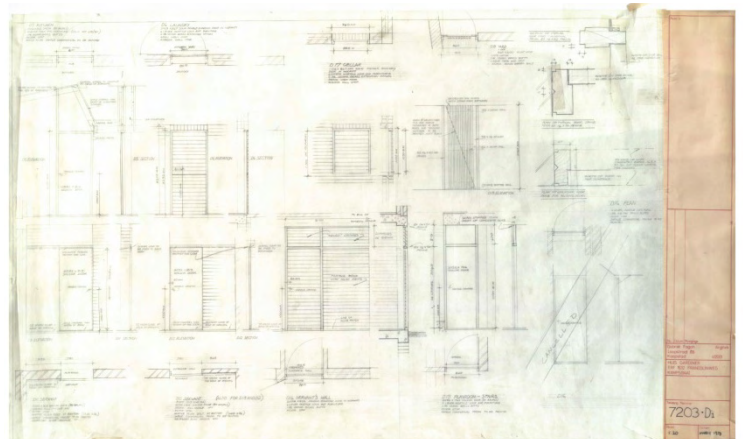
Working drawings



Section through dining room, entry hall and play room, pencil on bumf, Drwg. No. 7203-2, April 1973.

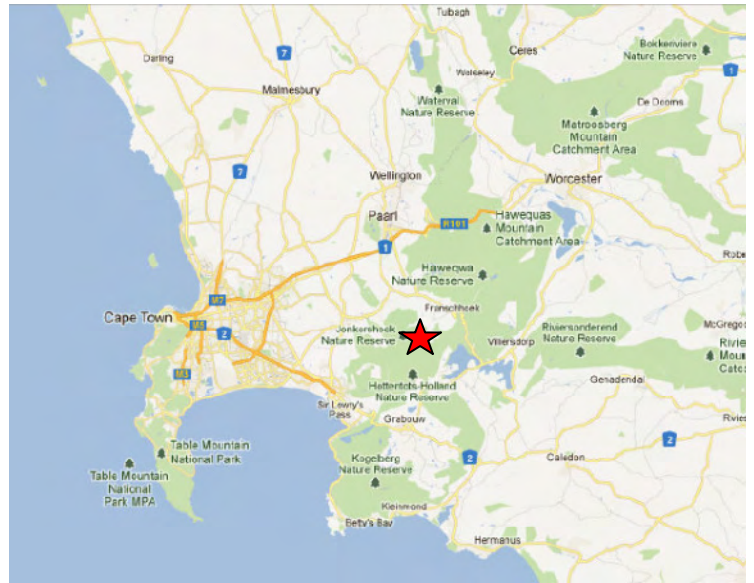


Roof details, pencil on bumf, Drwg. No. 7203-6A, April 1973.



Door schedule and details, pencil on bumf, Drwg. No. 7203-02, March 1974.

13.6.10: HOUSES IDAS VALLEY



<http://maps.google.co.za/> Accessed 25/04/2012 and amended by author.

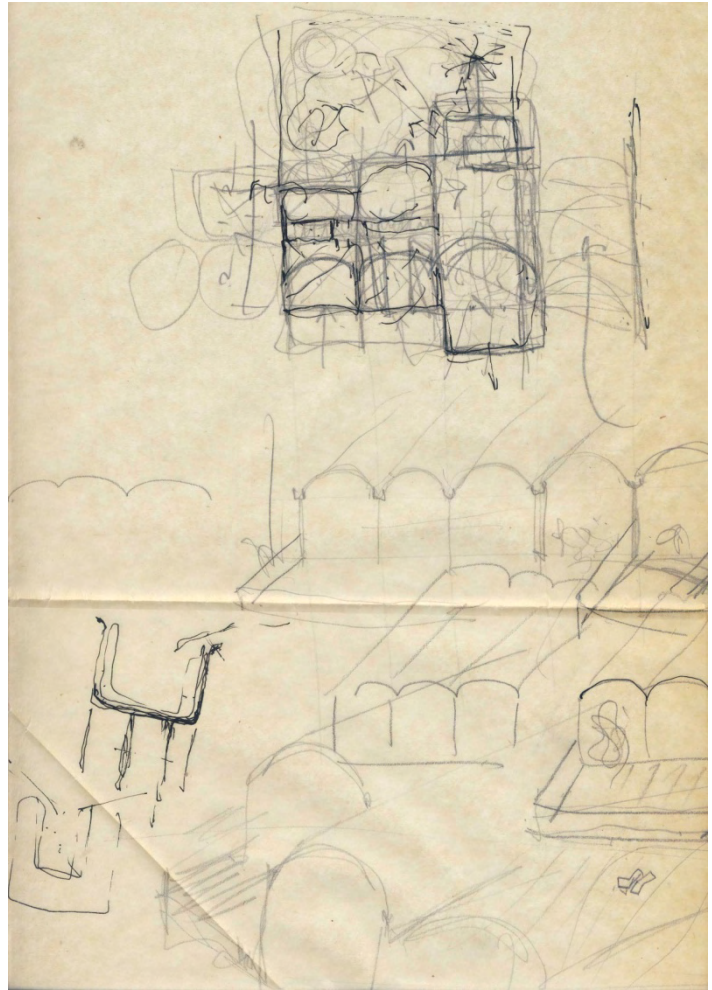


JOB NUMBER	7503
Slide Collection	EH
PROJECT	Idas Valley Housing
PROJECT TYPE	Residential Housing
LOCATION	Latitude: -33.917491° Longitude: 18.885549° Lelie Road, Stellenbosch
YEAR	1975
CLIENT	Major Erskine
COST	R33 506.45
AWARD	None
PUBLICATION/s	Fagan, G.T. 1983b. <i>Architectural language</i> . Paper delivered at the ISAA Architectural Congress, University of Cape Town, April 1983. Unpublished, Fagan archive. Fagan, G.T. 1985. <i>Regionalism</i> . Lecture delivered at

Architecture Student's Conference, University of Cape Town, 4 April 1985. Unpublished, Fagan archive.

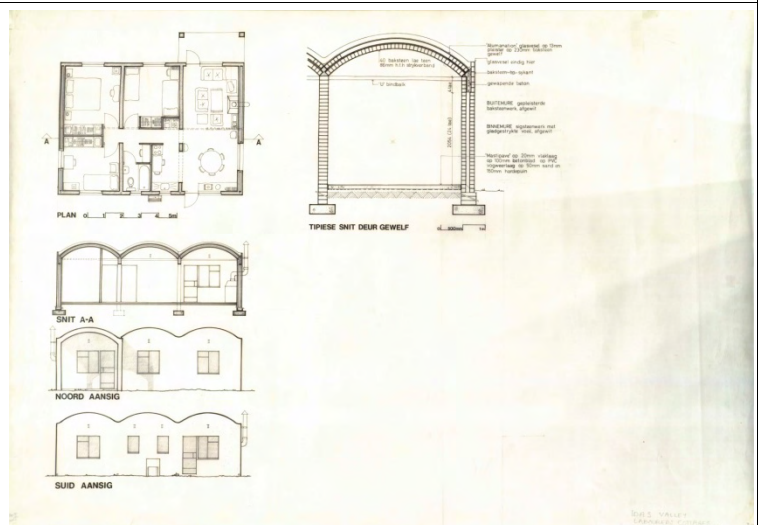
DOCUMENTATION

Conceptual drawings



Fagan sketch. Pencil on bumf. Unnumbered and undated.

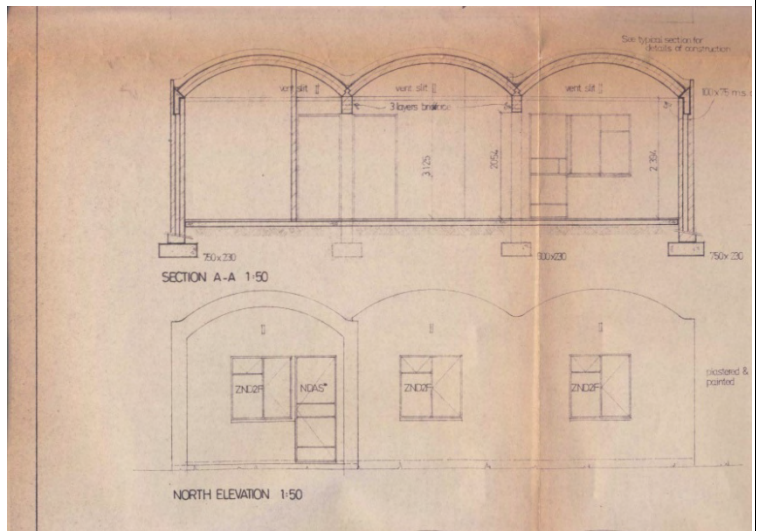
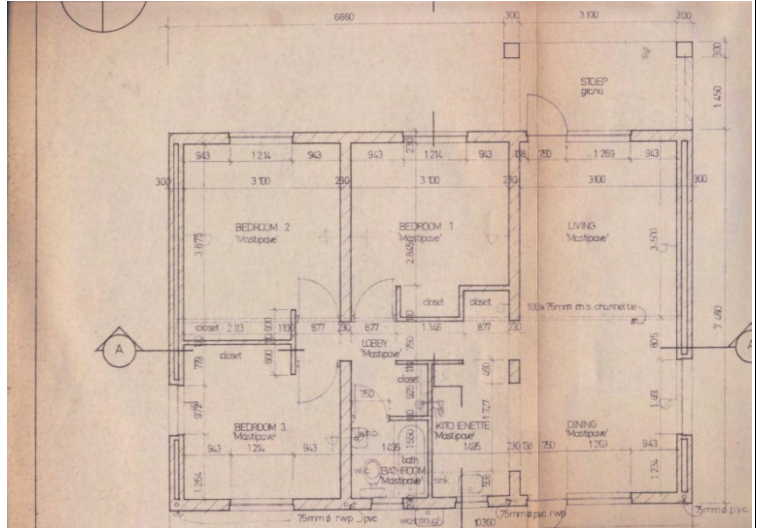
Sketch plans



1:200 plans and elevations unnumbered (ink on tracing)



Working drawings



Plans sections elevations 1:50 Drwg. No. 7503/1/2.

13.6.11: HOUSE SWANEPOEL



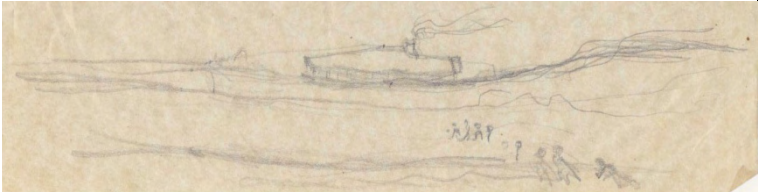

(Author, 2005 and Fagan archive Slide Collection IC)

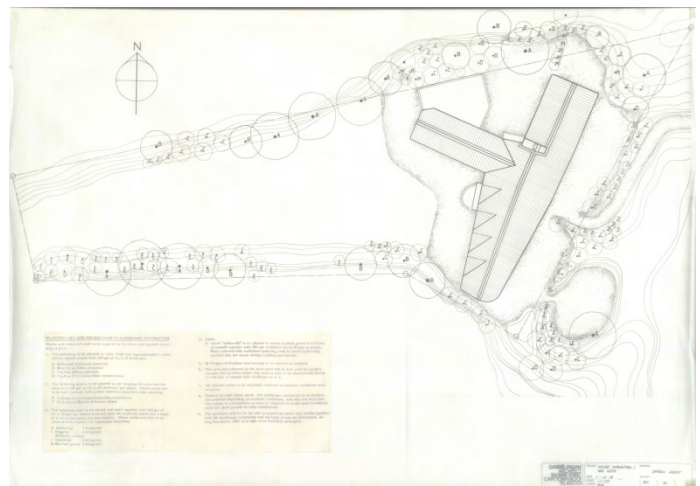


Map of the Western Cape. Red star indicates location of house (<http://maps.google.co.za/> Accessed 25/04/2012 and amended by author).



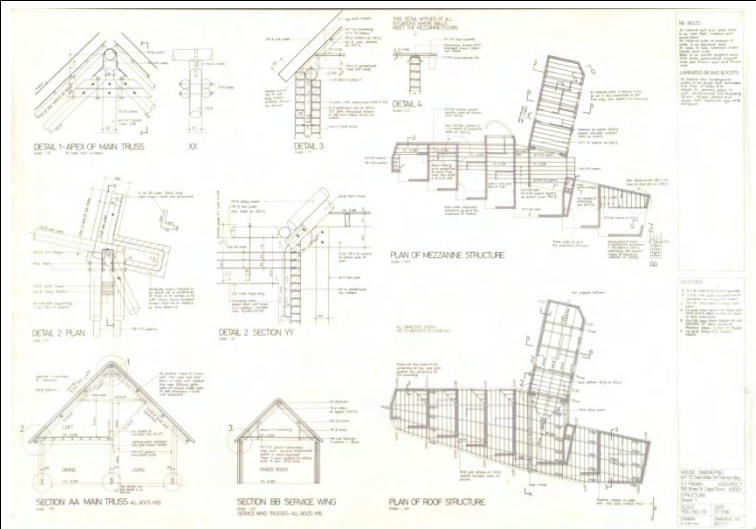
JOB NUMBER	8011
Slide collection	IC
PROJECT	Swanepoel holiday house
PROJECT TYPE	Residential
LOCATION	Cape St. Francis
YEAR	1980-1981
CLIENT	Jan (Swanie) and Montoux Swanepoel
COST	Contract amount: R110 000-00 Final account: R117 013-57
AWARD	1983 Institute of Architects Award

PUBLICATION/s	<p>Fagan, G.T. 1983b. <i>Architectural language</i>. Paper delivered at the ISAA Architectural Congress, University of Cape Town, April 1983. Unpublished, Fagan archive.</p> <p>Architect and Builder, May 1983.</p> <p>Architecture SA November/December 1983.</p> <p>De Kat March ?</p> <p>Sunday Times 30 October 1983.</p> <p>Tuinhuis 1990.</p>
DOCUMENTATION	
Conceptual drawings	 <p>Fagan sketch of house as a hammock in the dunes. Pencil on bumf. Undated and unnumbered.</p>
Sketch plans	 <p>ground floor plan soft and mezzanines shaded</p> <p>Ground floor plan 1:100, ink and Letraset on tracing, unnumbered and titled "Swanepoel Cape St. Francis".</p>

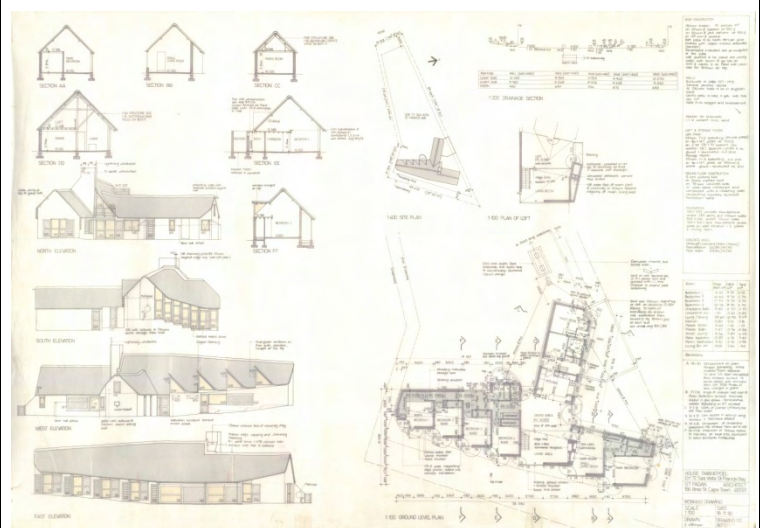


Sea Vista- Garden Layout 1-100 8011-29 01.12.181. Ink on tracing.

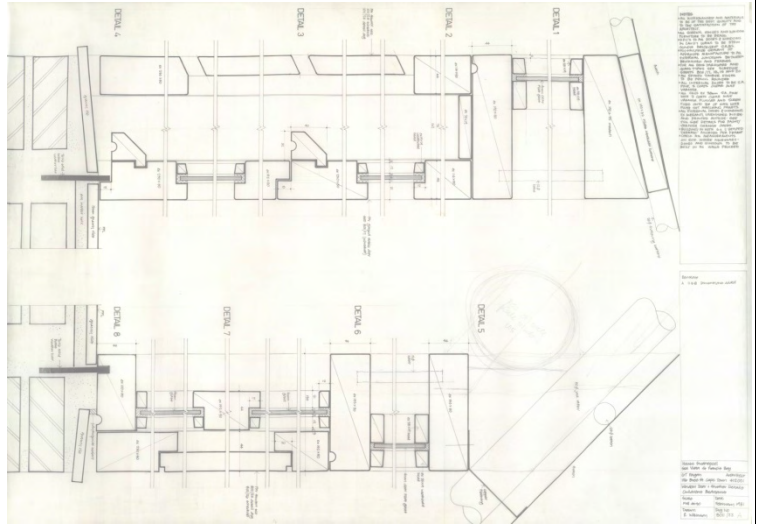
Working drawings



Structure sheet 1, 1:100 1:50 1:10, ink and pantone on tracing, 8011/5, 27.11.80.



Working drawing 1:100, ink, Letraset and pantone on tracing, 8011/1F, 18.11.80.

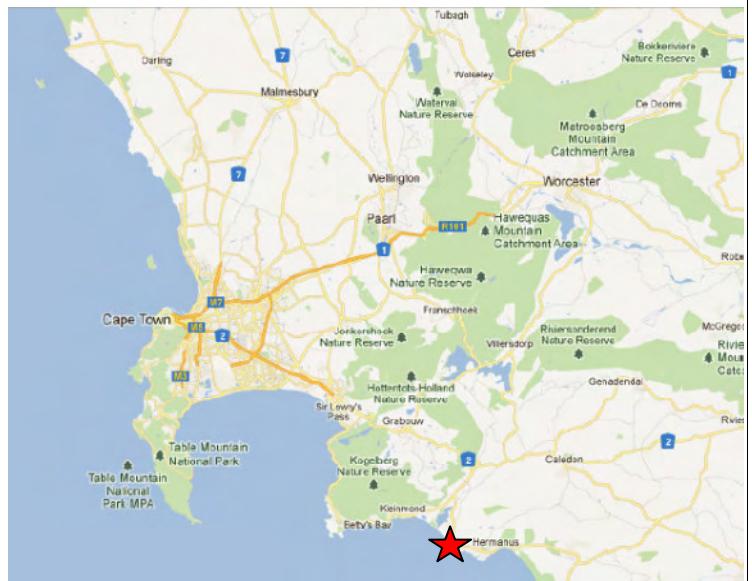


Window doors and shutter details FS, ink on tracing, 8011/22A.

13.6.12: HOUSE LÜCKHOFF



(Author, 2008)



Map of the Western Cape. Red star indicates location of house
(<http://maps.google.co.za/> Accessed 25/04/2012 and amended by author).



JOB NUMBER

8101

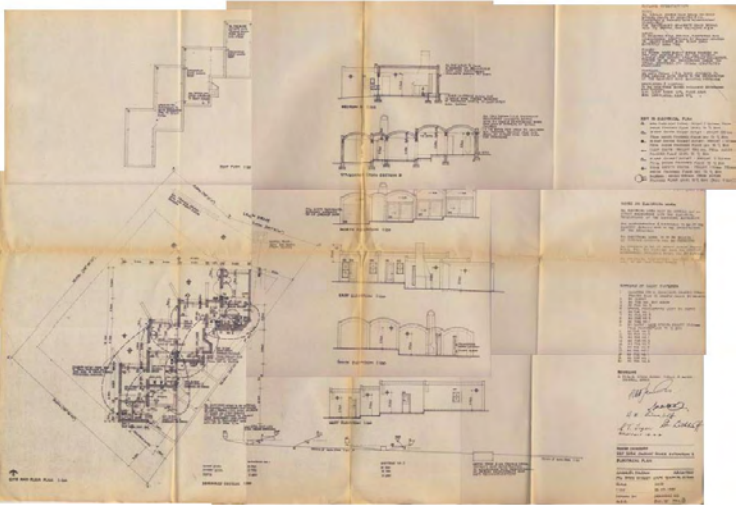
Slide Collection

HL

PROJECT

House Lückhoff

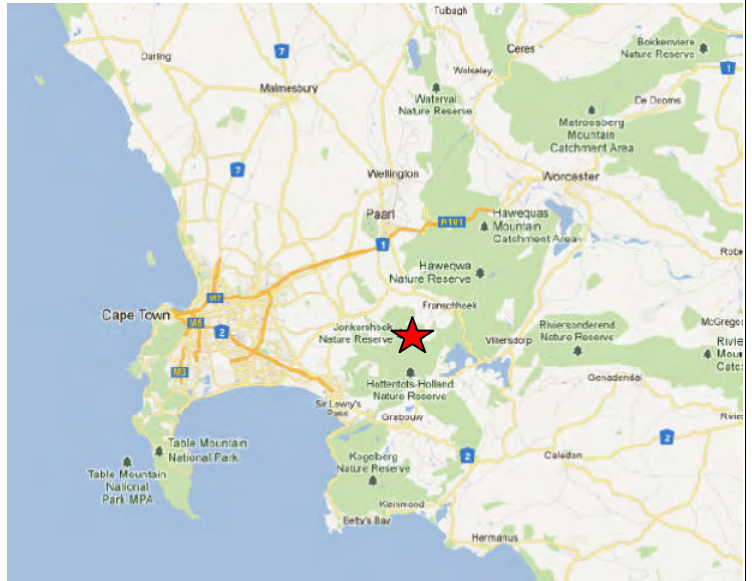


Slide Collection	
PROJECT TYPE	Residential
LOCATION	Latitude: -34.415041° Longitude: 19.174612° Lagoon Drive, Onrust River
YEAR	1981
CLIENT	Mrs. Henkiemay Lückhoff
COST	R115 000
AWARD	None
PUBLICATION/s	None
DOCUMENTATION	
Working drawings	 <p>Sketch plans 1:100. Drwg No. 8101-51. 18/03/1981.</p>

13.6.13: HOUSE BLOMMAERT



(Author, 2008)



Map of the Western Cape. Red star indicates location of house
(<http://maps.google.co.za/> Accessed 25/04/2012 and amended by author).



JOB NUMBER	8309 8204
Slide Collection	BT
PROJECT	Blommaert House
PROJECT TYPE	Residential
LOCATION	Latitude: -33.958175° Longitude: 18.870893° Faber Street, Stellenbosch
YEAR	1982
CLIENT	Blommaert
COST	R144 216
AWARD	None
SOURCES	Fagan, G.T. 2005, <i>Gabriel Fagan. Twenty Cape Houses</i> . Cape Town: Breestraat Publikasies.

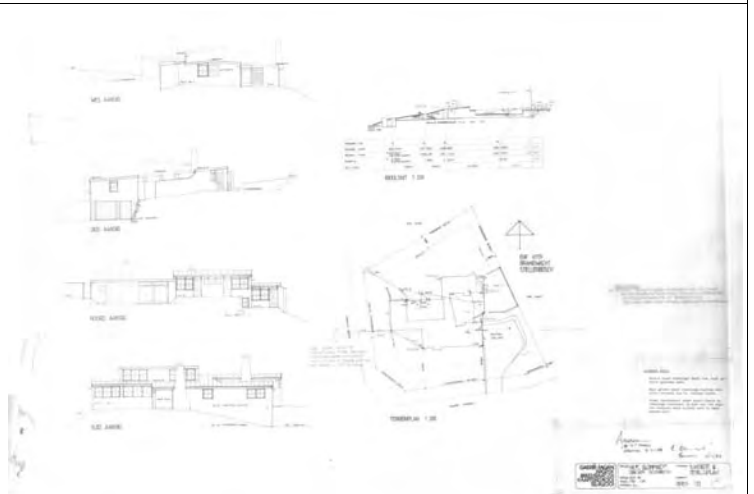
DOCUMENTATION

Sketch plans

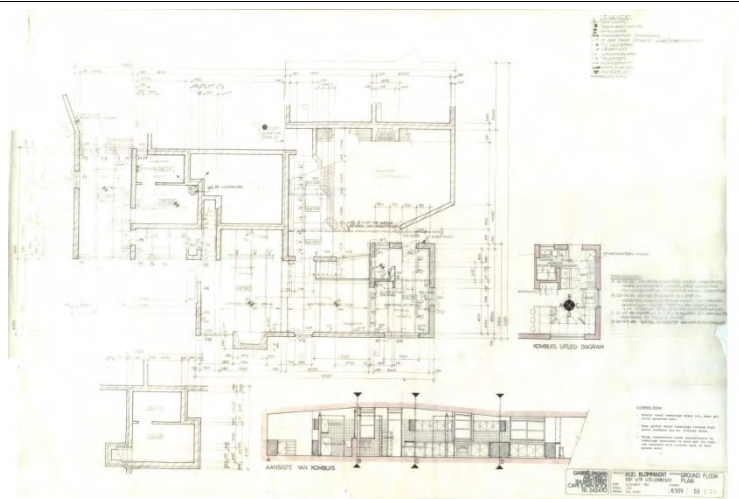


Sketch plans 1:100. Undated and unnumbered. Pencil crayon on ammonia print.

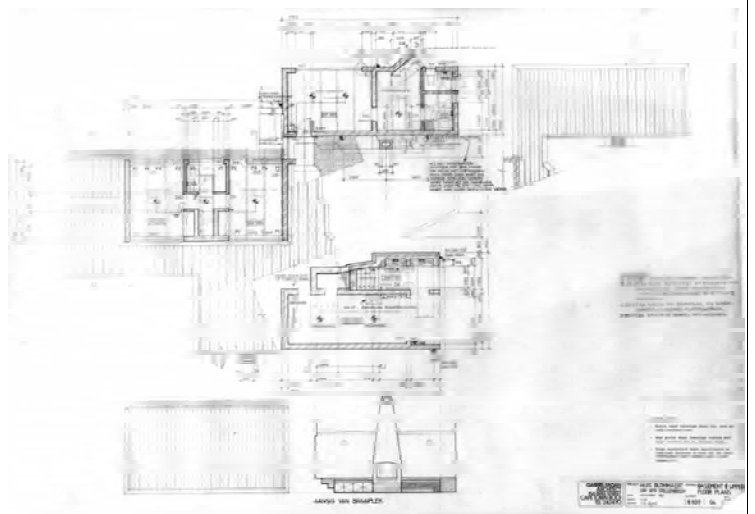
Working drawings



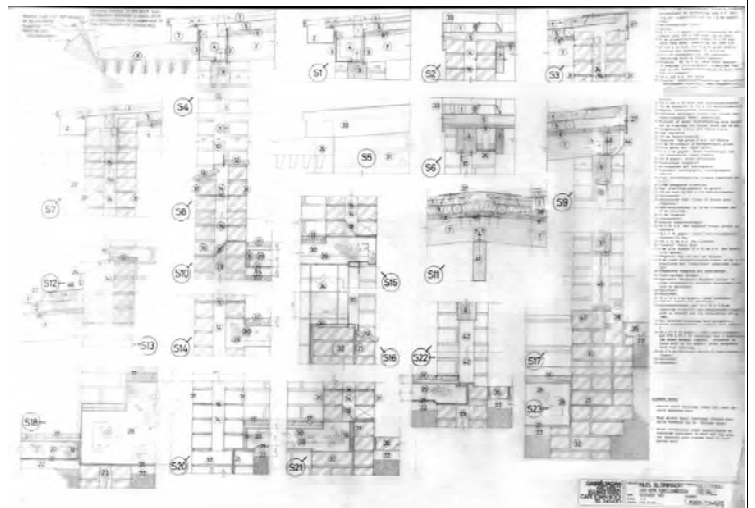
Elevations and site plan, pencil and/or ink on tracing, Drwg. No.VH1A.



Ground floor plan 1:50, pencil and/or ink on tracing, Drwg. No.8309-03D



Basement and upper floor plans, pencil and/or ink on tracing, Drwg. No. 8309-04.

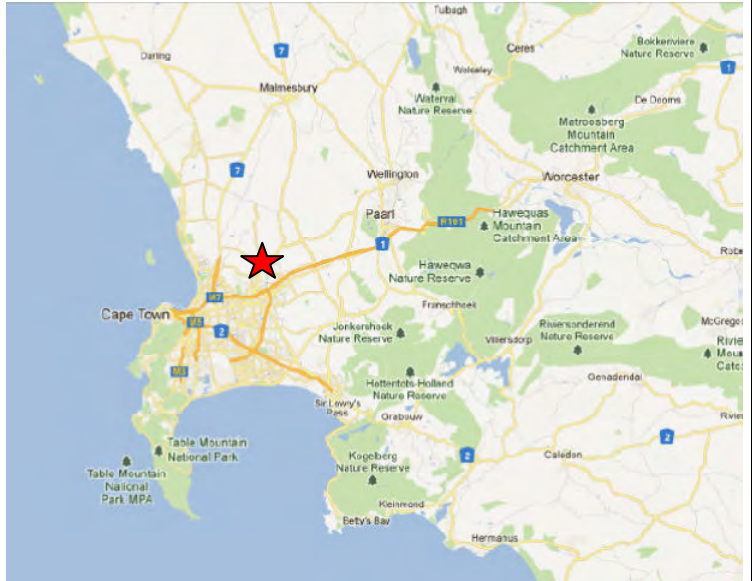


Section details, pencil and/or ink on tracing, S1-S23..

13.6.14: HOUSE NEETHLING




(Author, 2009)



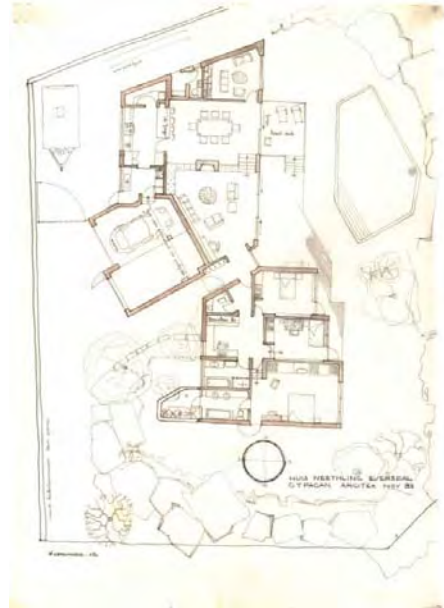
Map of the Western Cape. Red star indicates location of house (<http://maps.google.co.za/> Accessed 25/04/2012 and amended by author).



JOB NUMBER	8205
Slide Collection	JF
PROJECT	House Neethling
PROJECT TYPE	Residential
LOCATION	Durbanville
YEAR	1981
CLIENT	Mr. and Mrs Neethling originally, now Mr. Hans de Kwaadsteniet
COST	R11 500

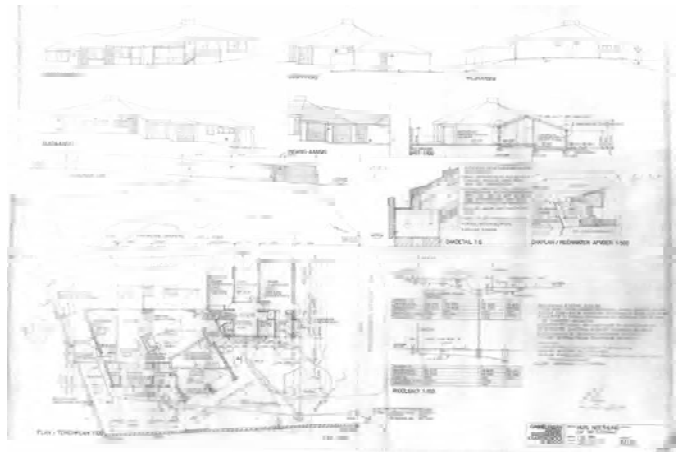
AWARD	None
PUBLICATION/s	Fagan, G.T. 2005, <i>Gabriel Fagan. Twenty Cape Houses</i> . Cape Town: Breesstraat Publikasies.
DOCUMENTATION	
Conceptual sketches	 <p>Fagan sketch. Ink and pencil on bumf. Undated and unnumbered.</p>

Sketch plans

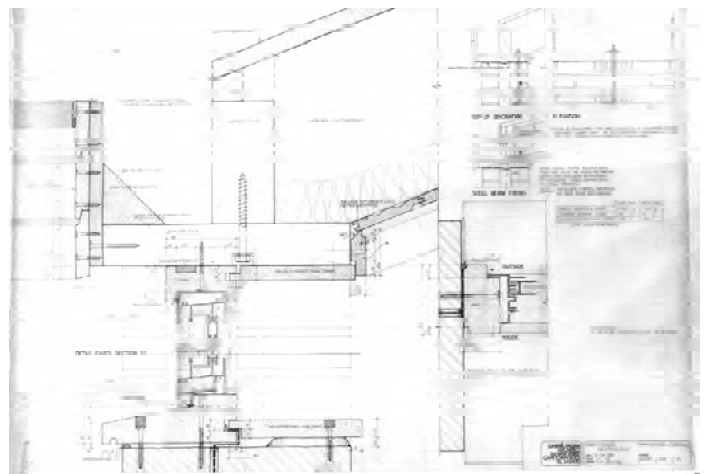


Sketch plan. Ink on Tracing. Unnumbered. November 1983.

Working drawings



Working drawing. No.1. 1 February 1984. Pencil on tracing.



Eaves details 8205 04A (pencil and ink on tracing)



13.6.15: HOUSE OUDEBASKRAAL



Map of the Western Cape. Red star indicates location of house (<http://maps.google.co.za/> Accessed 25/04/2012 and amended by author).

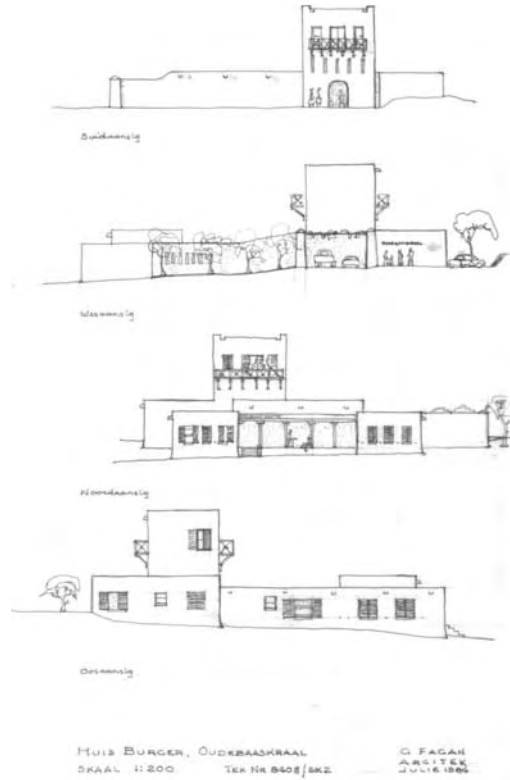


JOB NUMBER	8312
PROJECT	Oudebaaskraal
PROJECT TYPE	Residential
LOCATION	Tanqua Karoo
YEAR	1983
CLIENT	Alwyn Burger
COST	Not built
AWARD	None
PUBLICATION/s	Fagan, G.T. 2005, <i>Gabriel Fagan. Twenty Cape Houses</i> . Cape Town: Breesstraat Publikasies.

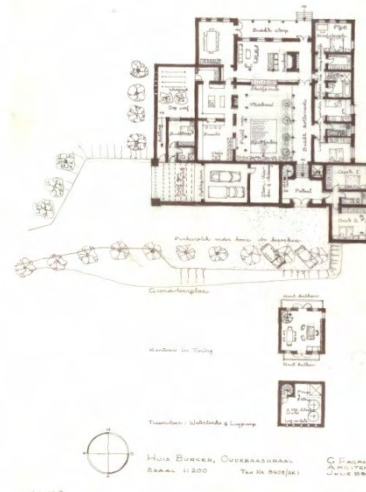


DOCUMENTATION

Sketch plans



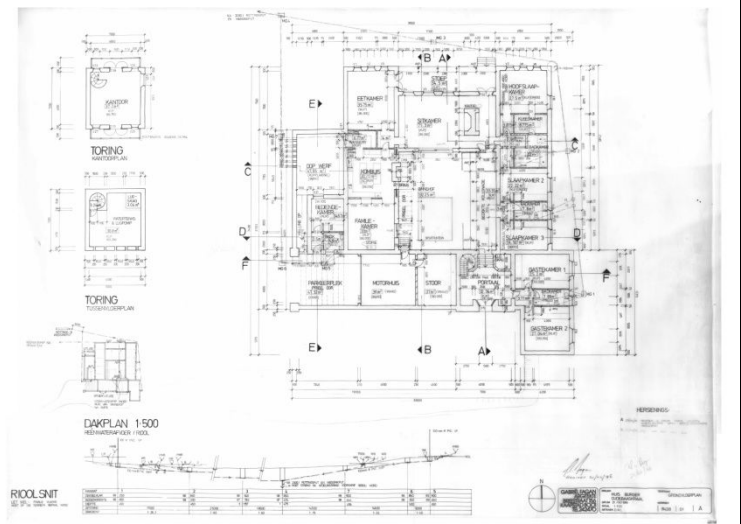
Sketch elevations. Ink On Tracing. Drwg. No. 8408 -1-3 SK2.



Sketch Plans. Ink On Tracing. Drwg. No. 8408 - 1-3 SK1.



Working drawings

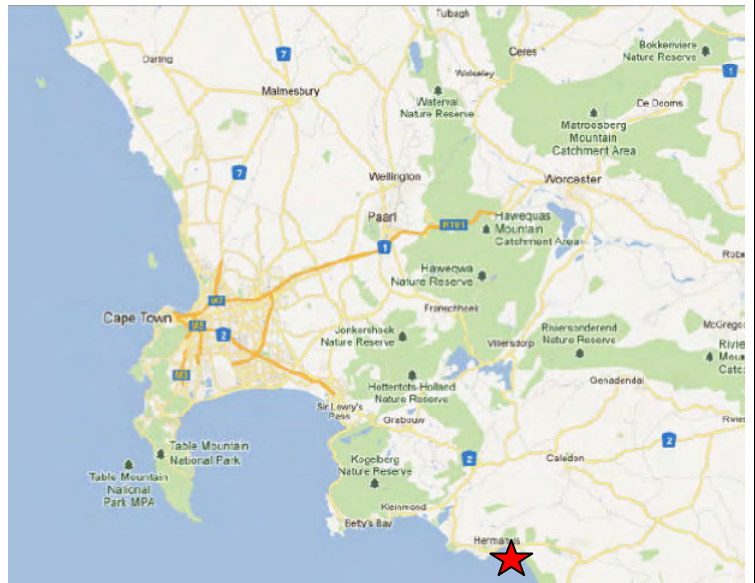


Plans and drainage section. Drwg. No. 8408-01A. Ink on tracing.



Sections Elev. Drwg. No. 8408-01-03. Ink on tracing.

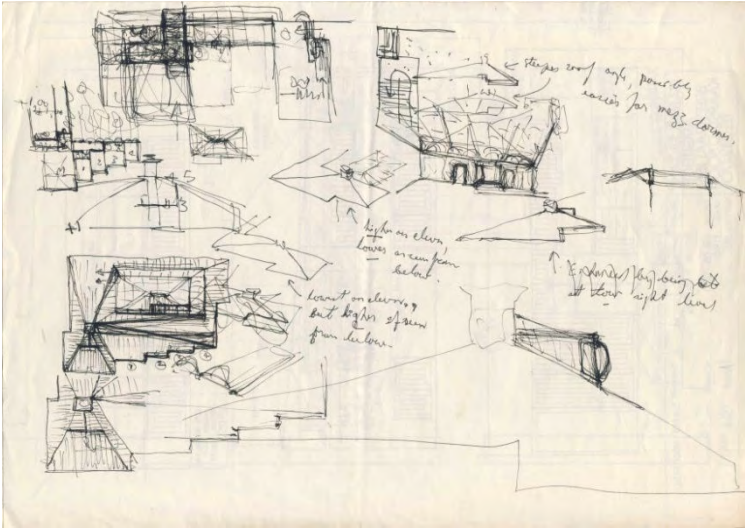
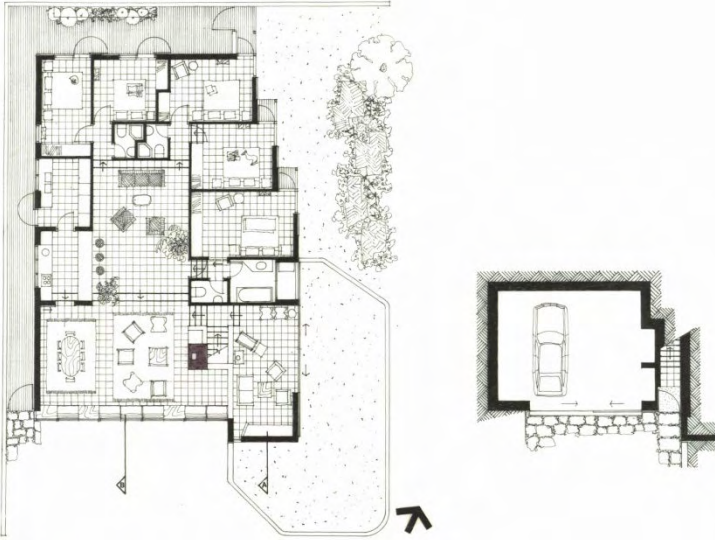
13.6.16: HOUSE SWANEPOEL

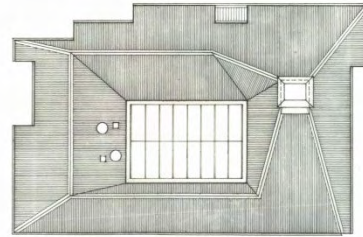
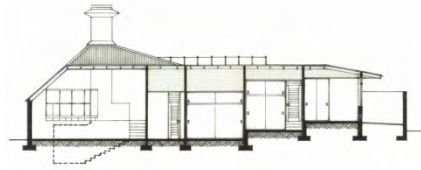
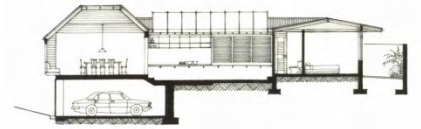


Map of the Western Cape. Red star indicates location of house (<http://maps.google.co.za/> Accessed 25/04/2012 and amended by author).

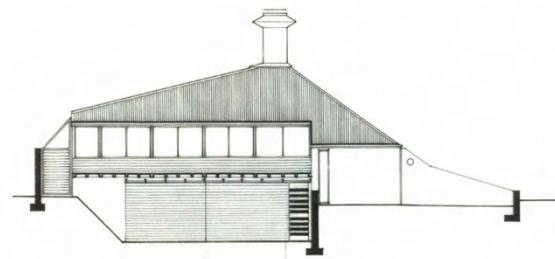
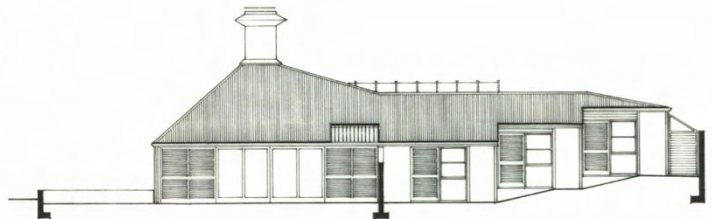
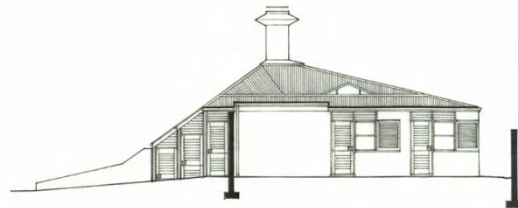


JOB NUMBER	9020
Slide collection	JS
PROJECT	House Swanepoel
PROJECT TYPE	Residential
LOCATION	Latitude: Longitude: Hermanus
YEAR	1991
CLIENT	Jan (Swanie) and Montoux Swanepoel
COST	Contract sum R469 600-00
AWARD	ISAA Verdienstebekroning 28 October 1993
PUBLICATION/s	Fagan, G.T. 2005, <i>Gabriel Fagan. Twenty Cape Houses</i> . Cape

	<p>Town: Breststraat Publikasies.</p> <p>Architecture SA September October 1993</p> <p>Architecture SA Nov/Dec 1993</p> <p>Tuinhuis 1990</p> <p>De Kat 1990?</p>
<p>DOCUMENTATION</p>	
<p>Conceptual drawings</p>	 <p>Fagan sketch. Ink on bumf. Undated and unnumbered.</p>
<p>Sketch plans</p>	 <p>Basement and ground floor plans.</p>



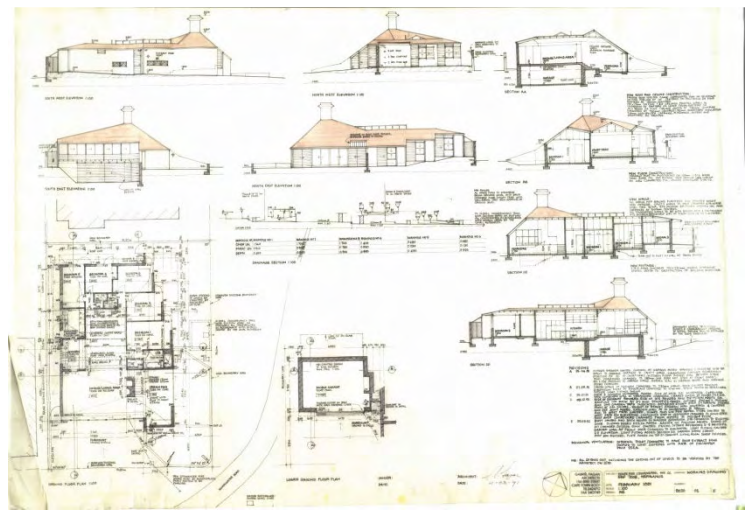
Sections and roof plan.



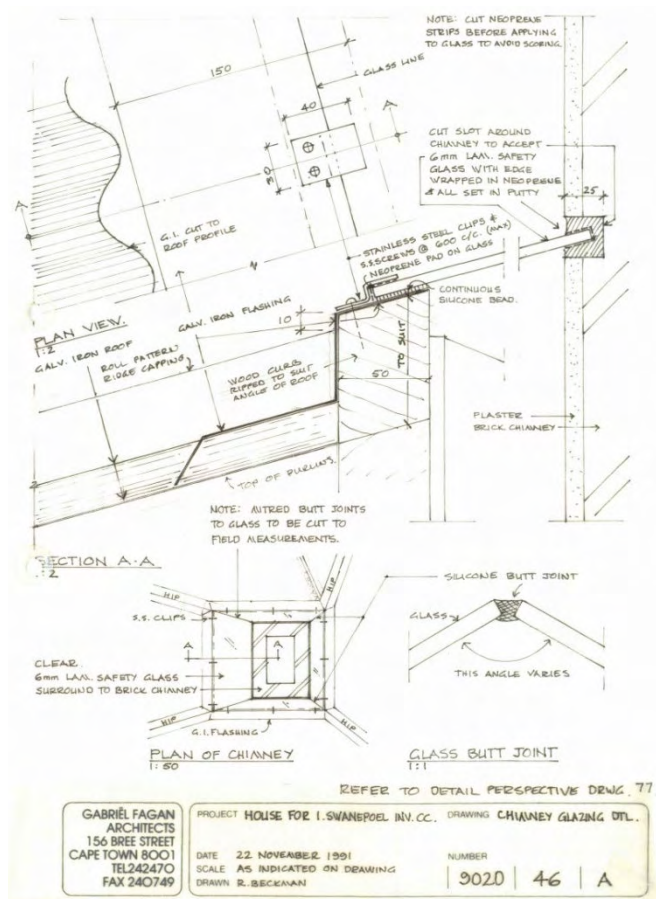
Elevations: north, east and south.

Sketch drawings. Unnumbered and undated (ink on tracing).

Working drawings



Working drawing (plans sections elevations 1:100 9020 03E (ink on tracing).

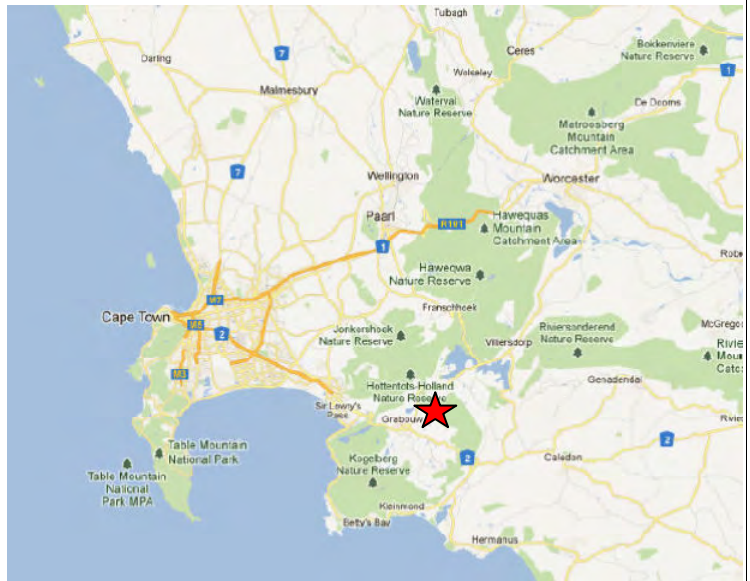


Chimney glazing 9020 46A (ink on tracing).

13.6.17: HOUSE AULDEARN



(Author, 2008)



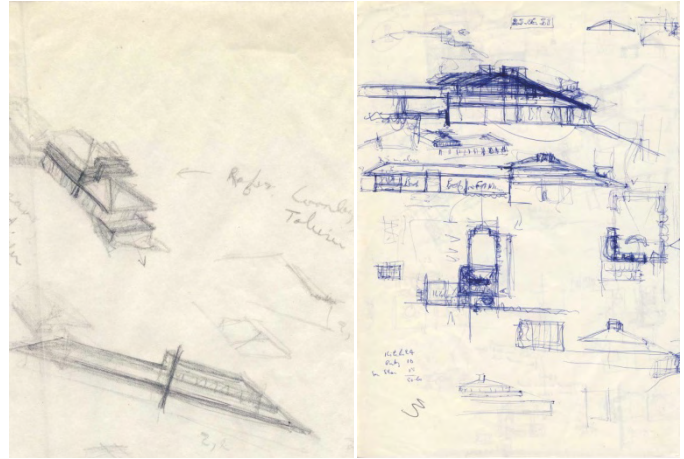
Map of the Western Cape. Red star indicates location of house (<http://maps.google.co.za/> Accessed 25/04/2012 and amended by author).



JOB NUMBER	9303
PROJECT	House Auldearn
PROJECT TYPE	Residential
LOCATION	Latitude: -34.235808° Longitude: 19.036253° Off the N2, Elgin, Western Cape.
YEAR	1992
CLIENT	Jenny and James Simpson
COST	Client wanted R500 000. Tender came in at R1.3 then reduced with removal of items like Iroko surrounds to windows, steel sheet roof in lieu of Mazista slate and a project manager (no architect) at R900 000.
AWARD	None
SOURCES	Fagan, G.T. 2005, <i>Gabriel Fagan. Twenty Cape Houses</i> . Cape Town: Breestraat Publikasies.

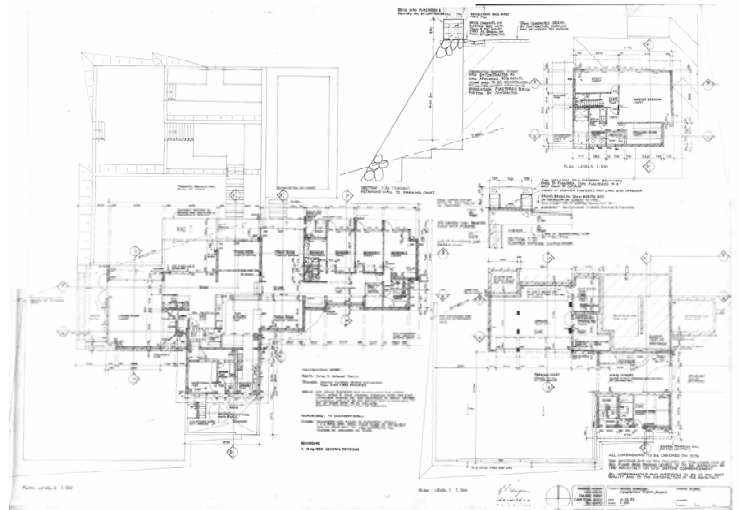
DOCUMENTATION

Conceptual drawings

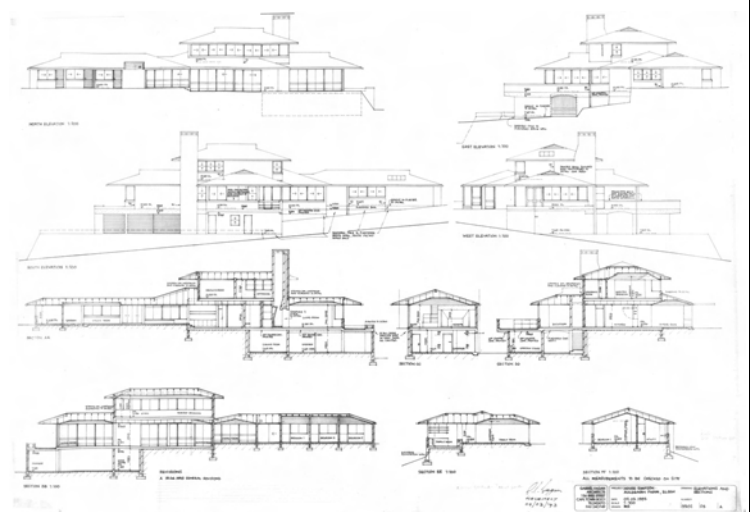


Fagan design sketches, unnumbered and undated, ink and pencil on paper.

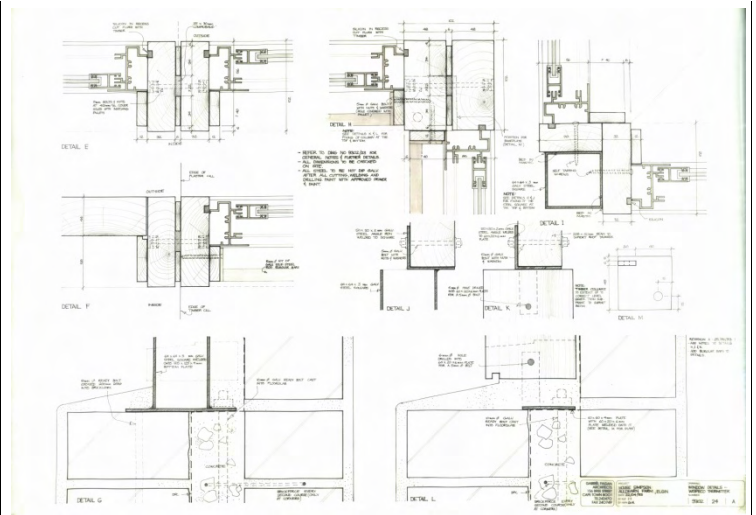
Working drawings



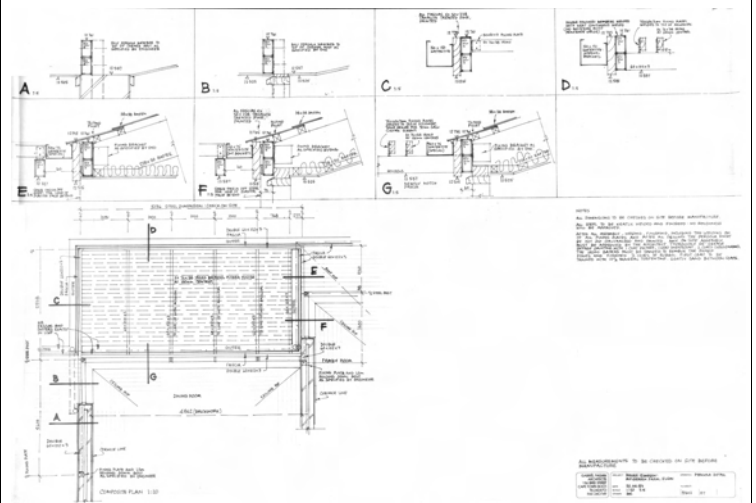
Plans, Drwg. No. 9302 02A (ink on tracing).



1.
Elevations and sections, Drwg. No. 9302 03A (ink on tracing).



Window details, Drwg. No. 9302 24A (ink on tracing).

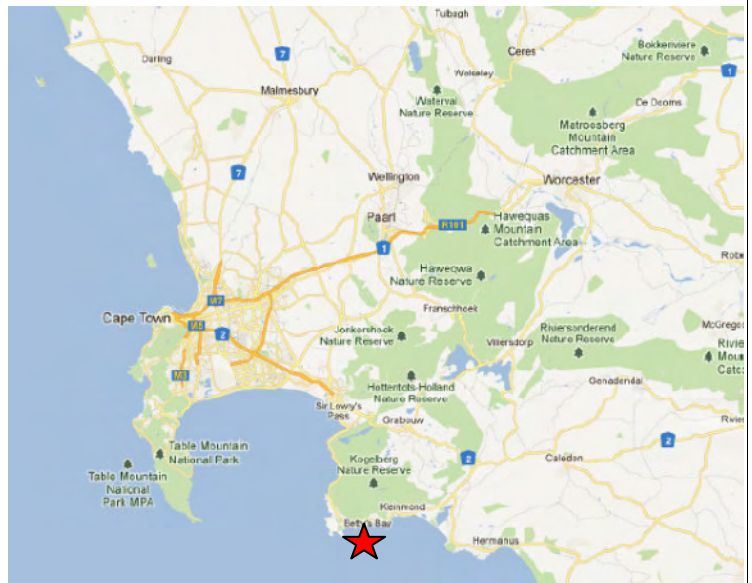


Pergola addition, Drwg. No. 9302 07 (ink on tracing).

13.6.18: HOUSE BEYERS



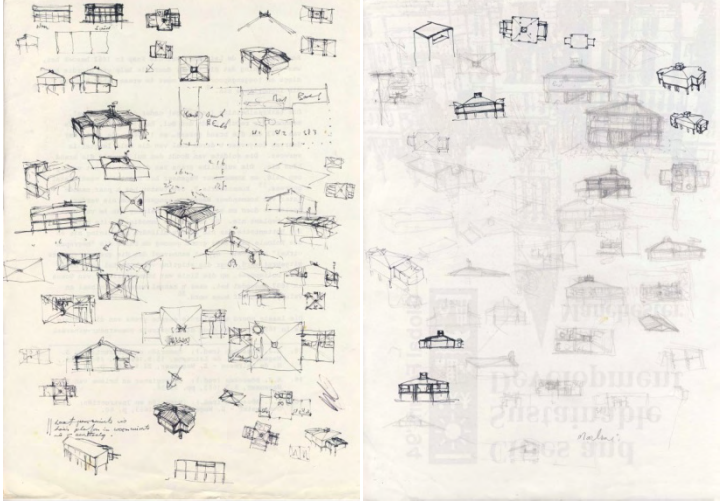

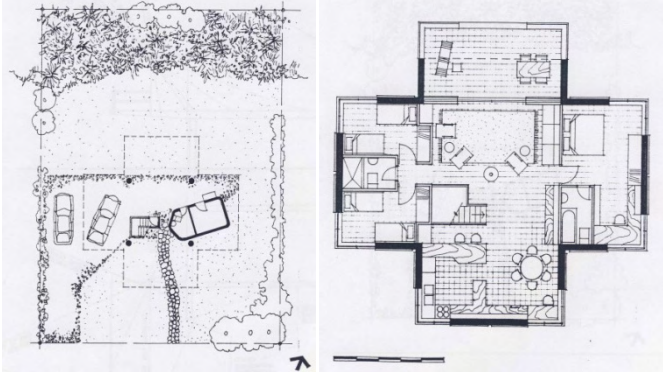
(Author, 2009)

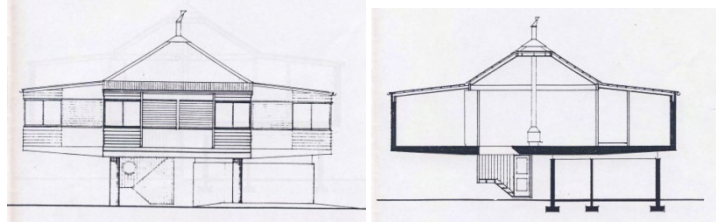


Map of the Western Cape. Red star indicates location of house
(<http://maps.google.co.za/> Accessed 25/04/2012 and amended by author).



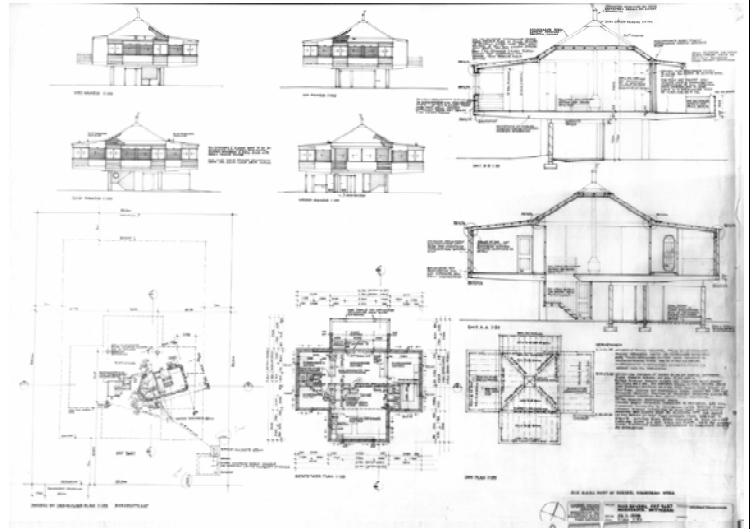
JOB NUMBER	9813
Slide Collection	AQ
PROJECT	Beyers House
PROJECT TYPE	Residential
LOCATION	Latitude: -34.359214° Longitude: 18.904010° Morea Road, Betty's Bay
YEAR	1998
CLIENT	Drs AD and Louise Beyers
COST	R481 792-00 23/0/98 (later R615 577 26/1/99) Client later limited to R500 000 and the accepted at R523 900. Final seems to be R553 734.84

AWARD	SAIA Award of Merit, 18 October 2001
PUBLICATION/s	The Digest of South African architecture 2002. SA Architect May/June 2002. Fagan, G.T. 2005, <i>Gabriel Fagan. Twenty Cape Houses</i> . Cape Town: Breestraat Publikasies.
DOCUMENTATION	
Conceptual drawings	 <p>Fagan thumbnail sketches, unnumbered and undated ink on reused paper.</p>
Sketch plans	 <p>1:50 cardboard model.</p> 

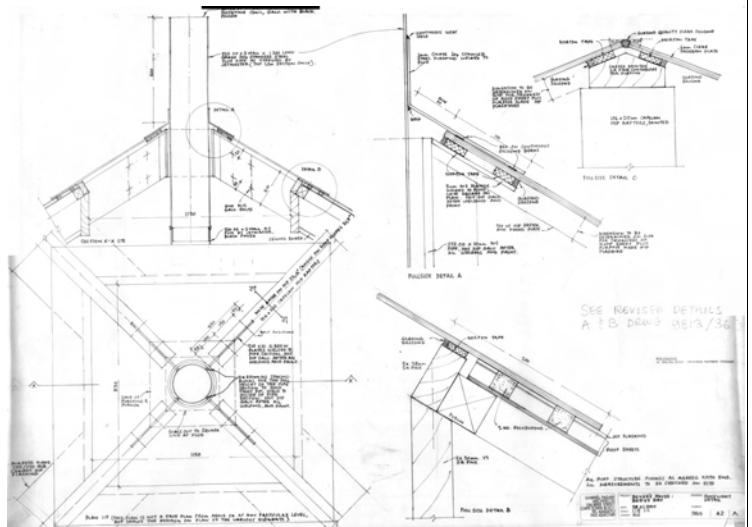


Sketch plan and elevation 1:100 unnumbered (ink on tracing).

Working drawings



Plans sections elevations 1:100 1:50, Drwg. No. 9813 02C (ink on tracing).

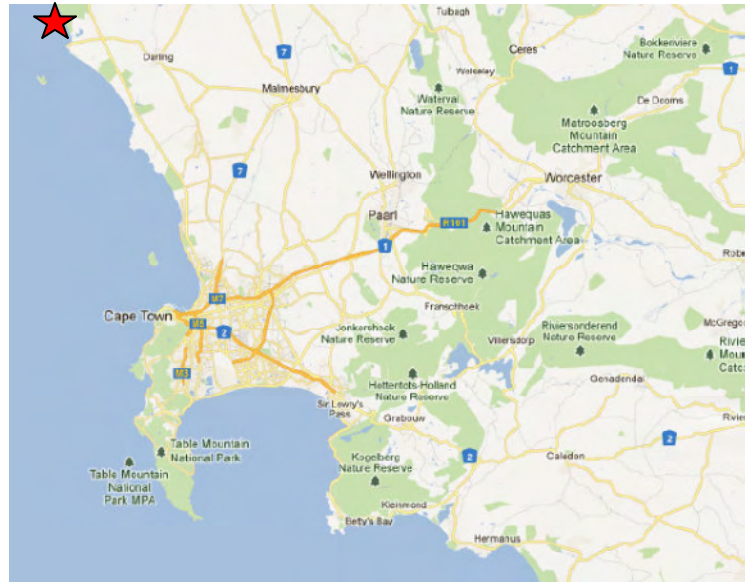


Roof details 1:5 and 1:1, Drwg. No. 9813 42A (ink on tracing).

13.6.19: HOUSE PARADYS



(Author, 2008)



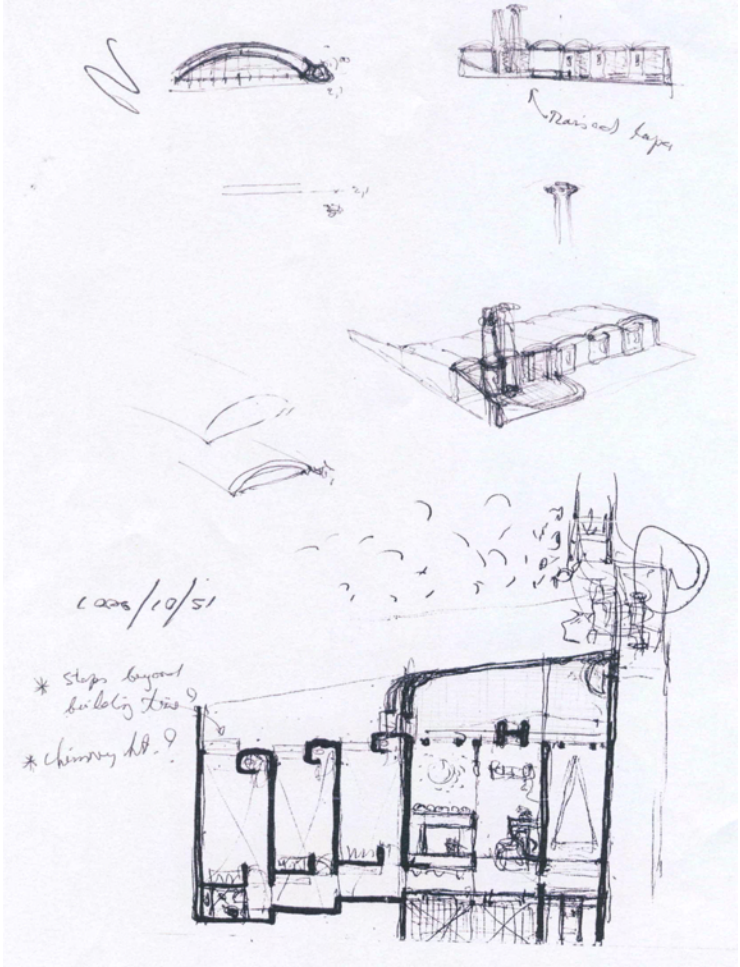
Map of the Western Cape. Red star indicates location of house (here slightly off map to the north)

(<http://maps.google.co.za/> Accessed 25/04/2012 and amended by author).

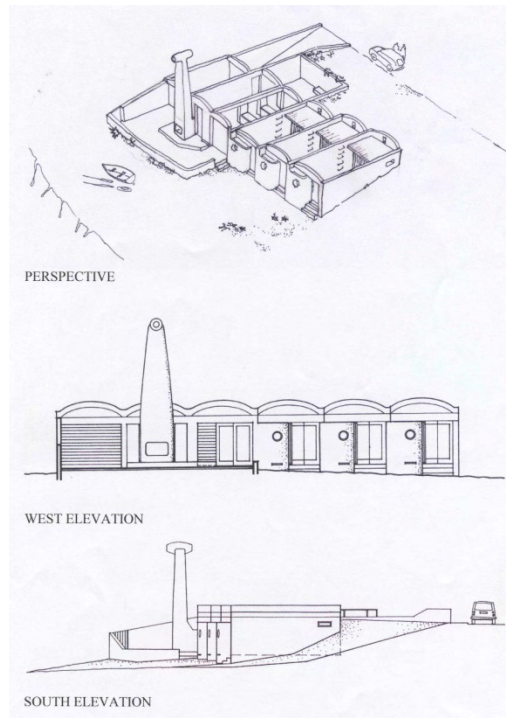


JOB NUMBER	0204 Slide Collection LM
Slide Collection	LM
PROJECT	Fagan holiday house
PROJECT TYPE	Residential
LOCATION	Paradise Beach, Langebaan Latitude: -33.040406° Longitude: 18.038058°
YEAR	2003
CLIENT	Mr. and Mrs. Fagan
COST	R115 000 to builder (material costs to Fagan)
AWARD	SAIA Award of Merit, September 2006

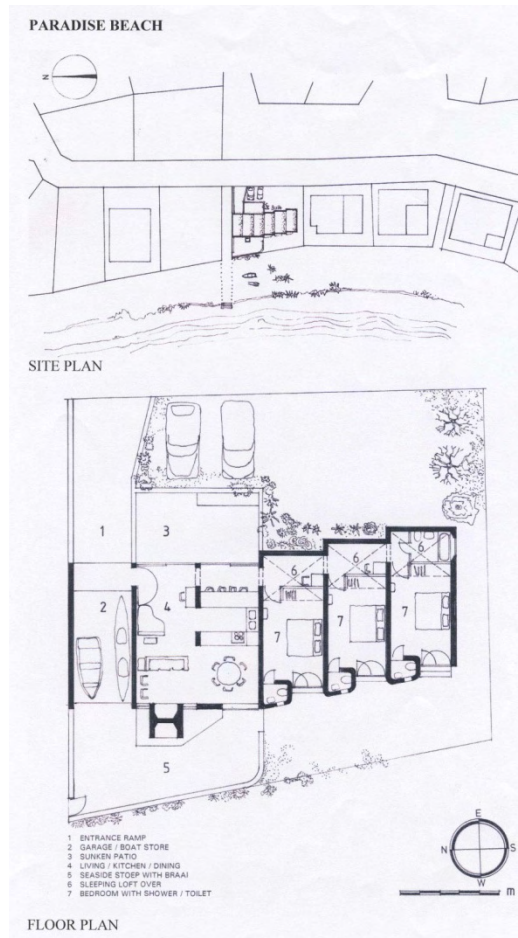


<p>PUBLICATION/s</p>	<p>Architectural Review November 2004.</p> <p>Fagan, G.T. 2005, <i>Gabriel Fagan. Twenty Cape Houses</i>. Cape Town: Breesstraat Publikasies.</p> <p>Journal of the South African Institute of Architects March/April 2005.</p> <p>Digest of South African Architecture 2004.</p>
<p>DOCUMENTATION</p>	
<p>Conceptual sketches</p>	 <p>Fagan sketches, unnumbered and undated.</p>

Sketch plans

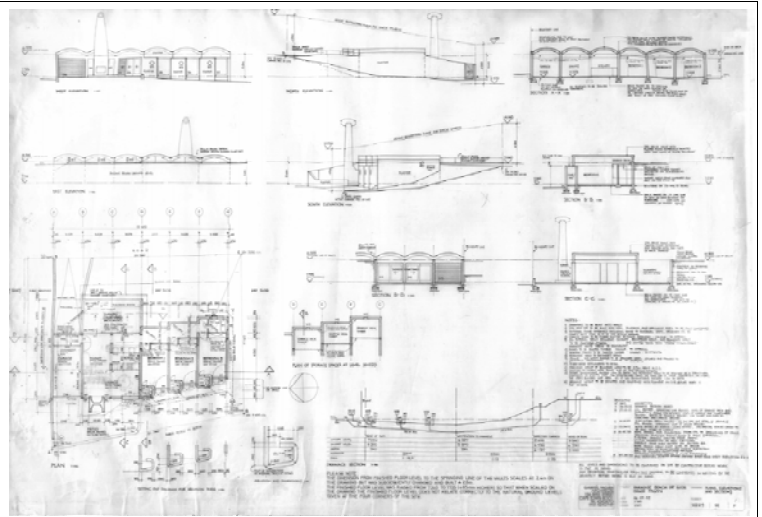


Sketch 3D and west and south elevations, copy of ink on tracing.

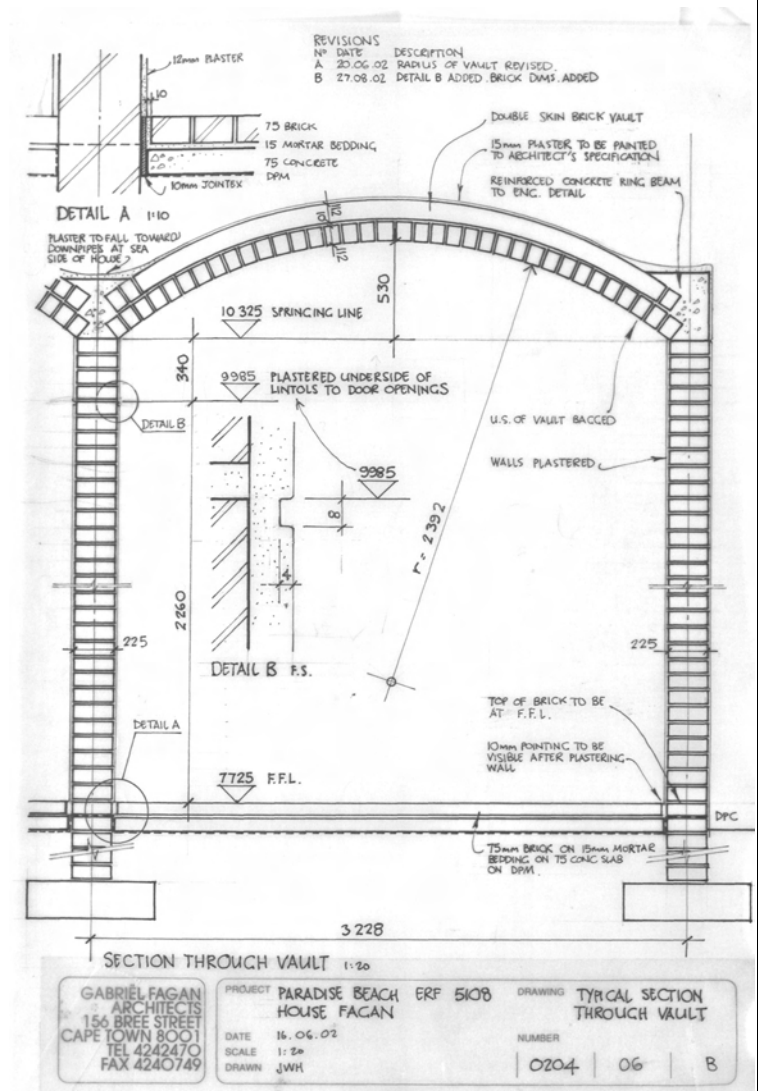


Site plan and plan, copy of ink on tracing.

Working drawings



Plans sections elevations 1:100, 0204 01F. Ink on tracing.

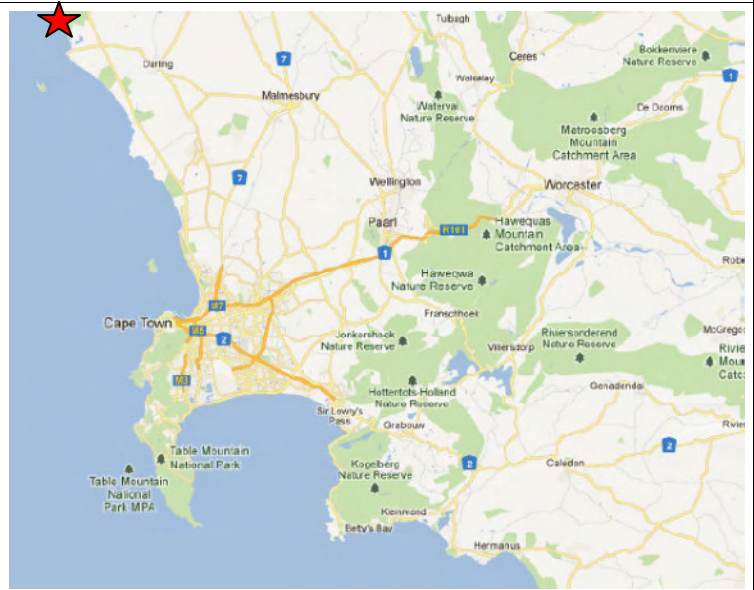


Section 1:20, 0204 06B. Ink on tracing.

13.6.20: HOUSE BRINK



(Author, 2009)



Map of the Western Cape. Red star indicates location of house (here slightly off map to the north)

(<http://maps.google.co.za/> Accessed 25/04/2012 and amended by author).



JOB NUMBER	0814
PROJECT	House Brink
PROJECT TYPE	Residential
LOCATION	Paradise Beach, Langebaan Latitude: -33.041789° Longitude: 18.037312°
YEAR	2002
CLIENT	Maree Brink
COST	unknown
AWARD	None
PUBLICATION/s	Fagan, G.T. 2005, <i>Gabriel Fagan. Twenty Cape Houses</i> . Cape Town: Breestraat Publikasies. Die Burger 21 July 2007

DOCUMENTATION

Conceptual sketches

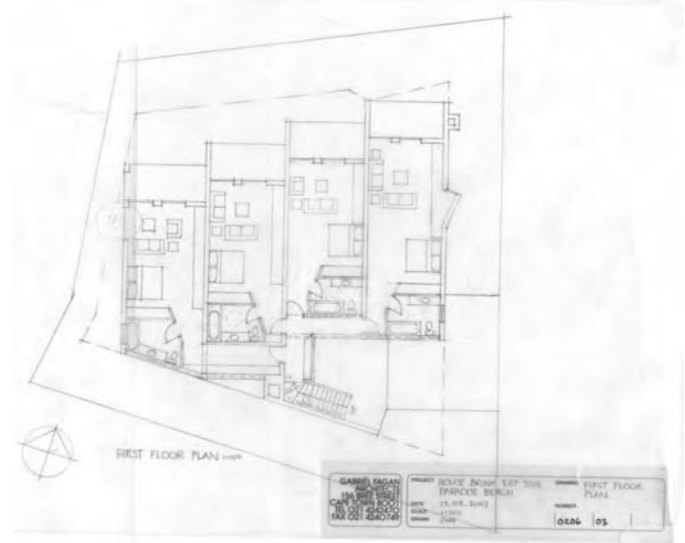


Fagan sketch of early scheme, pencil on white paper. Undated and unnumbered.



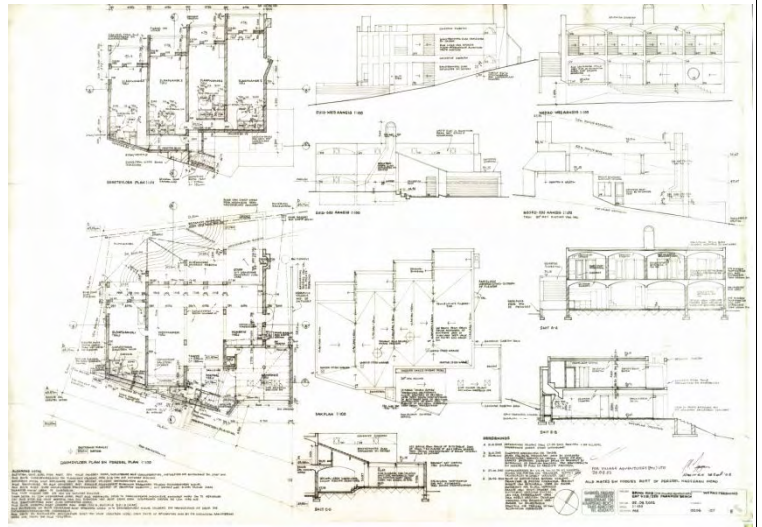
Cardboard model of early scheme. Undated and unnumbered.

Sketch plan

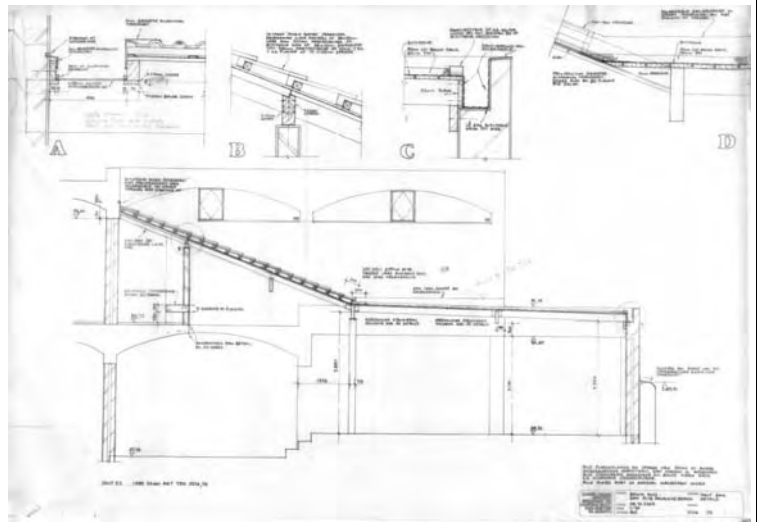


Sketch Plan. 1-100. 0206-03. Pencil On Tracing.

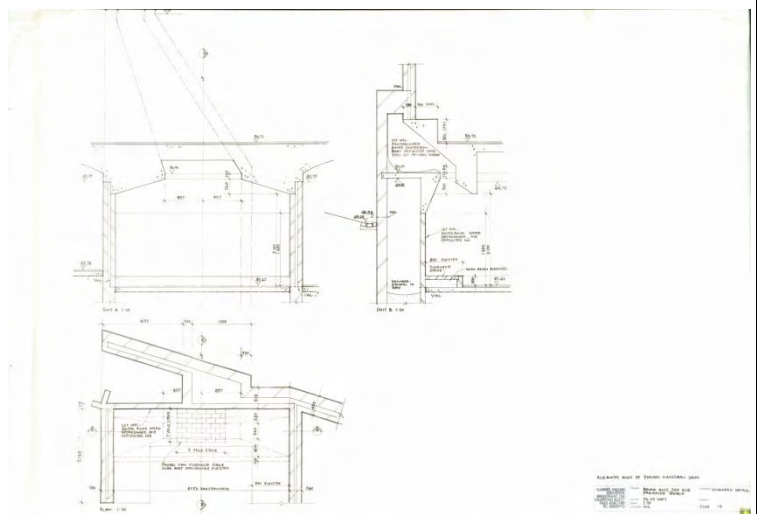
Working drawings



Plans Sections Elevations. Drwg. No. 0206-07. Ink On Tracing.



Sections 1-20. Drwg. No. 0206-22. Ink On Tracing.

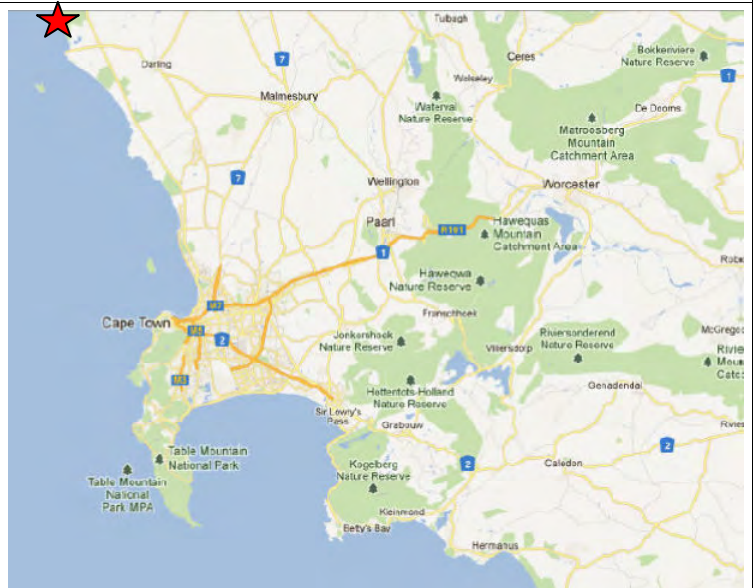


Chimney. Drwg. No. 1-20 0205 - 19. Ink On Tracing.

13.6.21: PATERNOSTER HOUSING



(Photograph of house under construction (Fagan archive, undated).



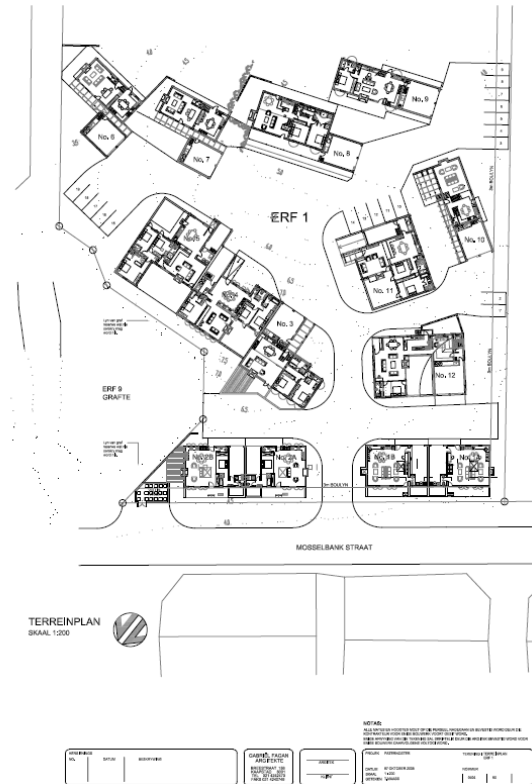
Map of the Western Cape. Red star indicates location of houses (here slightly off map to the north)

(<http://maps.google.co.za/> Accessed 25/04/2012 and amended by author).



JOB NUMBER	0405
PROJECT	House Brink
PROJECT TYPE	Residential
LOCATION	Paternoster Latitude: -33.041789° Longitude: 18.037312°
YEAR	2004
CLIENT	unknown
COST	unknown
AWARD	None
PUBLICATION/s	None
DOCUMENTATION	

Sketch plan



Site plan (Fagan archive, Drwg No. 0404 60, 24/06/2006).

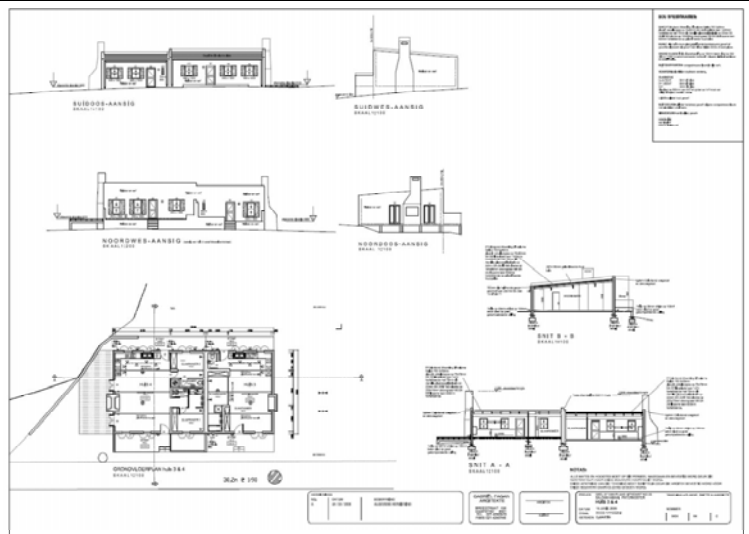


Cardboard model (Fagan archive, undated).

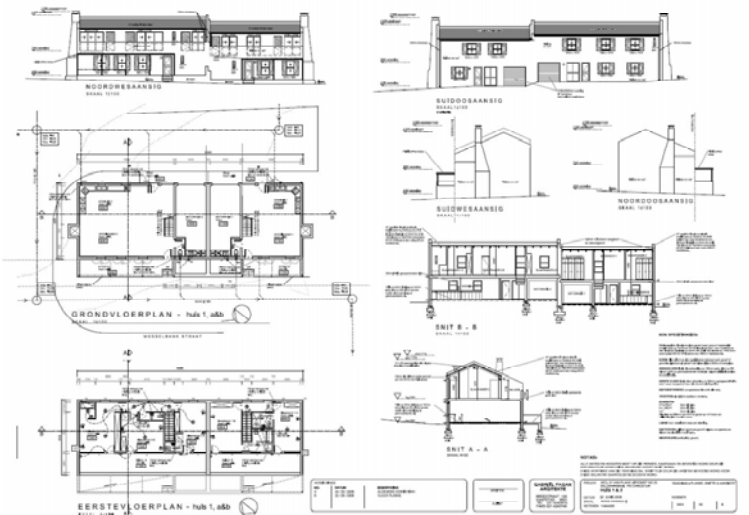


Cardboard model (Fagan archive, undated).

Working drawings



Plans, sections and elevations of House 3 and 4 (Fagan archive, Drwg No. 0404 64C, 24/06/2006).

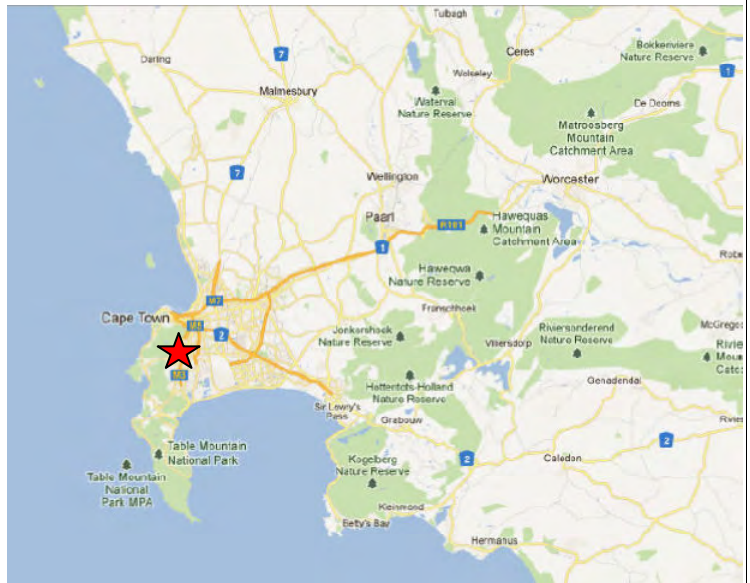


Plans, sections and elevations of House 1 and 2 (Fagan archive, Drwg No. 0404 64C, 22/06/2006).

13.6.22: HOUSE MITCHELL



(Author, 2009)



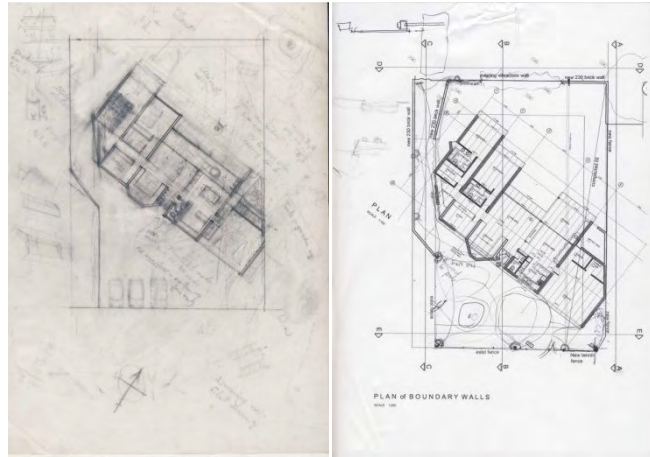
Map of the Western Cape. Red star indicates location of house (<http://maps.google.co.za/> Accessed 25/04/2012 and amended by author).



JOB NUMBER	0503
PROJECT	House Mitchell
PROJECT TYPE	Residential
LOCATION	Latitude: -33.971525° Longitude: 18.451366° 21 Cedar Road, Newlands
YEAR	2005
CLIENT	Mitchell
COST	R1 327 000.00
AWARD	None
PUBLICATION/s	None

DOCUMENTATION

Conceptual sketches



Fagan sketch (pencil on tracing) and developed computer plot (Fagan archive, undated and unnumbered).

Sketch plans

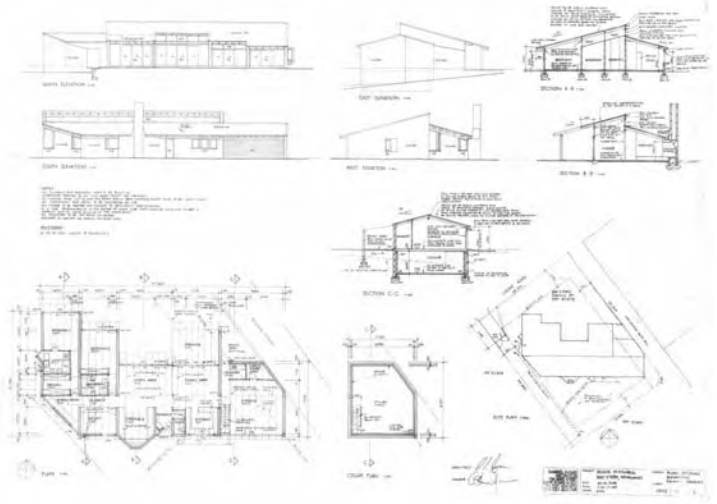


Sketch elevation, ink on tracing, unnumbered.



Sketch plan, ink on tracing, 0502 01.

Working drawings

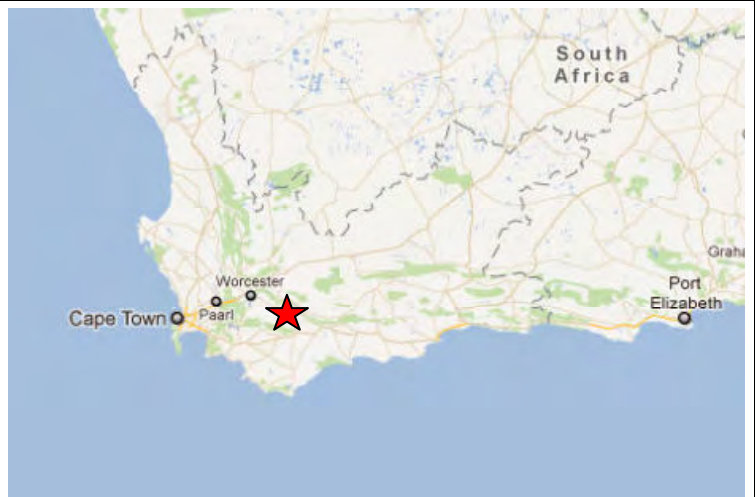


Sketch plans, sections and elevations, paper copy of ink on tracing, 0502-02A.

13.6.23: HOUSE FAGAN JUNIOR



(Author, 2009)



Map of the Western Cape. Red star indicates location of house (<http://maps.google.co.za/> Accessed 25/04/2012 and amended by author).



JOB NUMBER

0507

PROJECT

Johan Fagan House (cousin of Hennie Fagan)

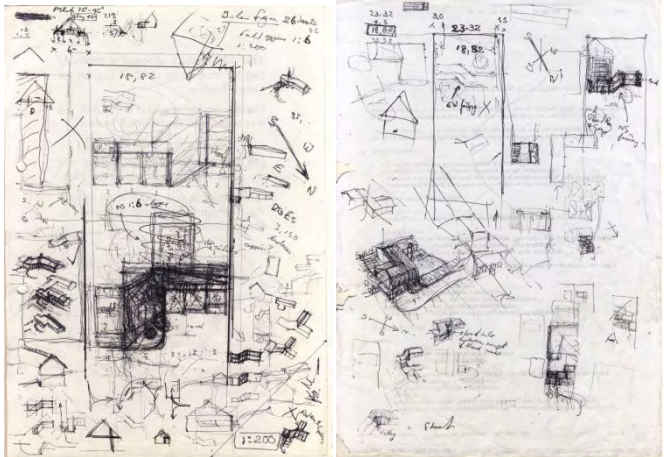
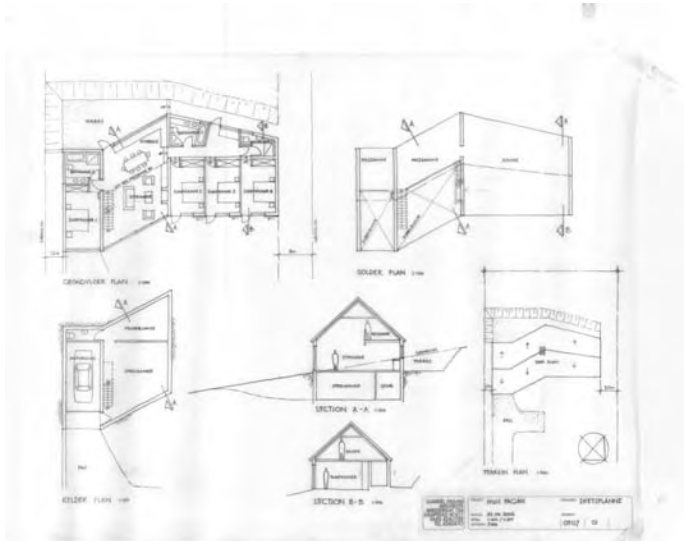
PROJECT TYPE

Residential

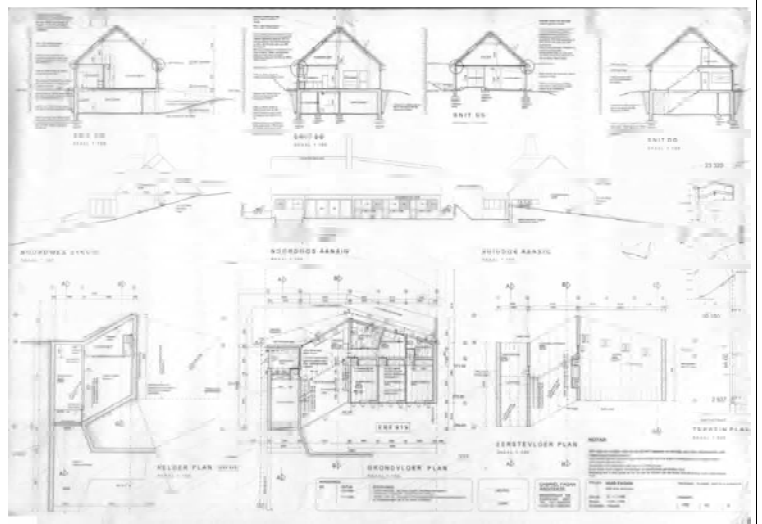
LOCATION

Latitude: -33.953910°
Longitude: 19.820550°



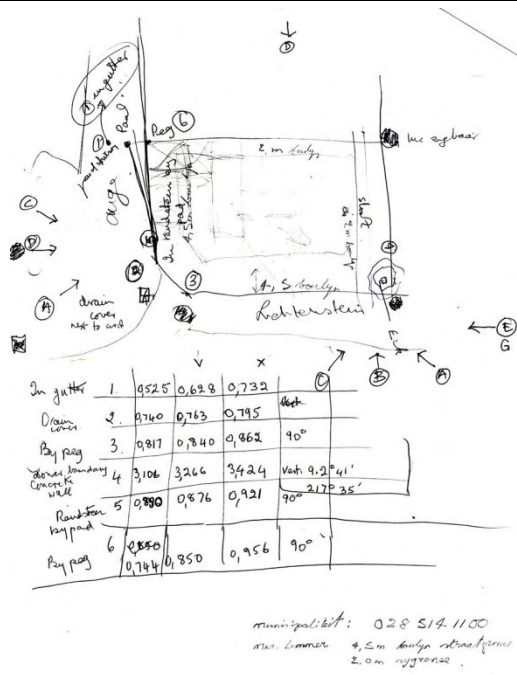
	Smith Street, McGregor
YEAR	2005
CLIENT	Prof Johannes Jacobus Fagan
COST	Plot = R540 000 House = R1 572 000
AWARD	None
PUBLICATION/s	None
DOCUMENTATION	
Conceptual sketches	 <p>Fagan sketches. Ball point pen on the back of reused paper. Undated and unnumbered.</p>
Sketch plans	 <p>Sketch Plans + Sections. Drwg. No. 0507-01. Ink on Tracing.</p>

Working drawings



Plans Sections Elev. Drwg. No. 0502-05. Computer plot on tracing paper.

13.6.24: HOUSE VAN ZYL



Map of the Western Cape. Red star indicates location of house (<http://maps.google.co.za/> Accessed 25/04/2012 and amended by author).

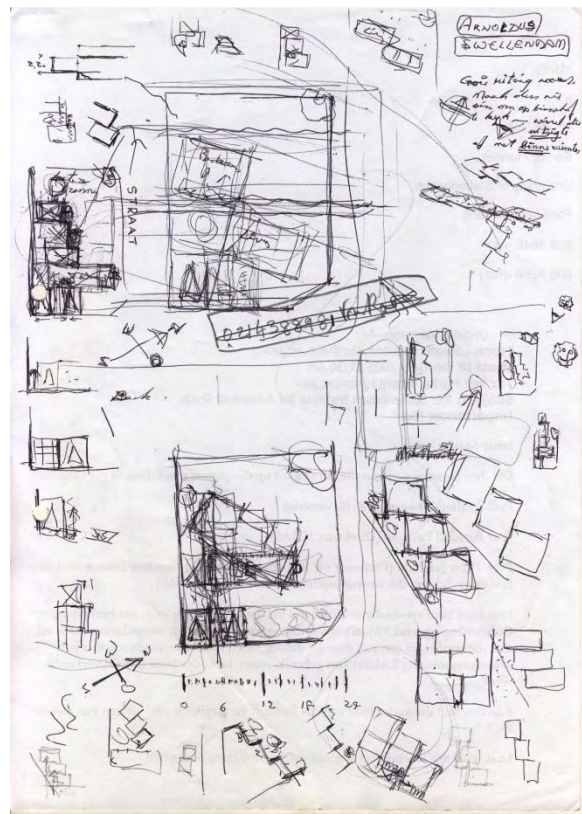


(Fagan archive. Site levels and details. Unnumbered and undated)

JOB NUMBER	0701
PROJECT	Van Zyl House
PROJECT TYPE	Residential

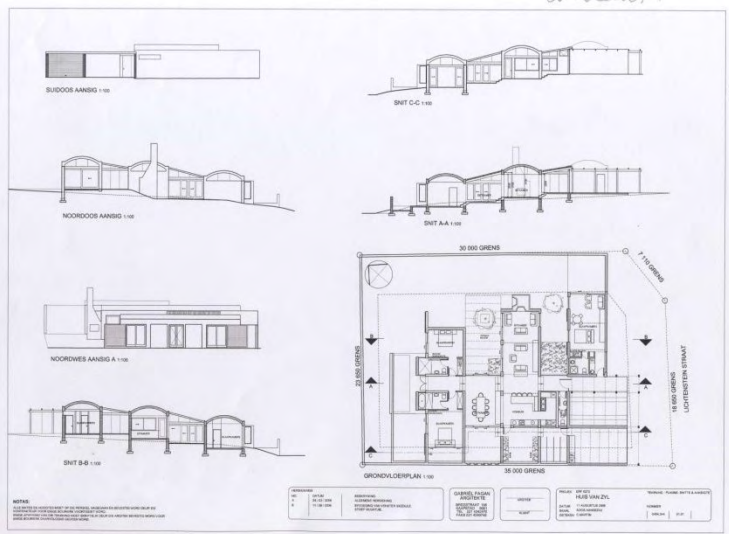


LOCATION	Swellendam
YEAR	2007
CLIENT	Van Zyl
COST	Not constructed
AWARD	None
PUBLICATION/s	None
DOCUMENTATION	
Conceptual sketches	



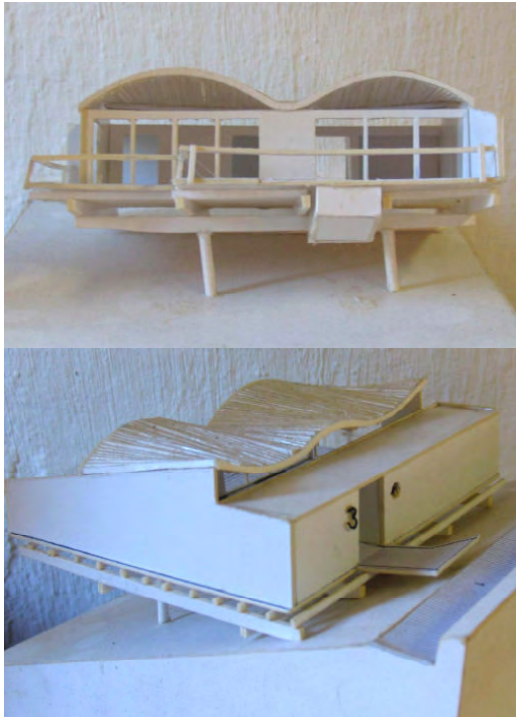
Fagan sketches - unnumbered and undated. Ball point pen on the back of reused paper.

Sketch plans

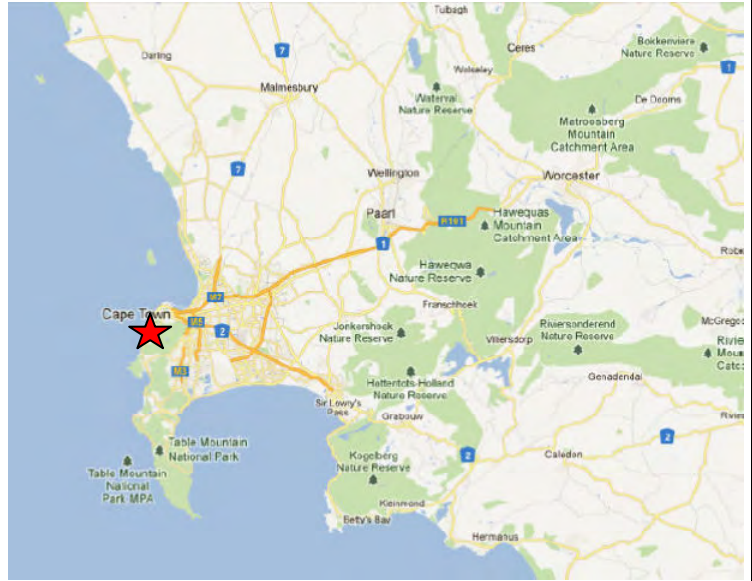


Plans, sections and elevations at 1:200. Drwg No. 0404 3+4. Computer printout on white paper.

13.6.26: ROUND HOUSE ECO LODGE



Cardboard model (Fagan archive. undated)

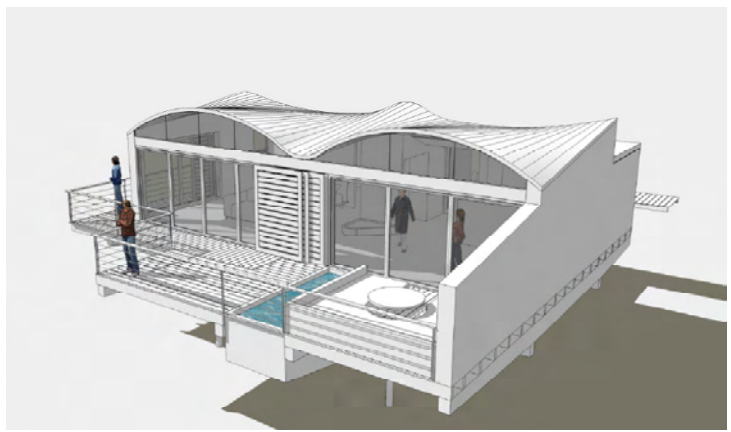


Map of the Western Cape. Red star indicates location of ho
(<http://maps.google.co.za/> Accessed 25/04/2012 and amended by author).

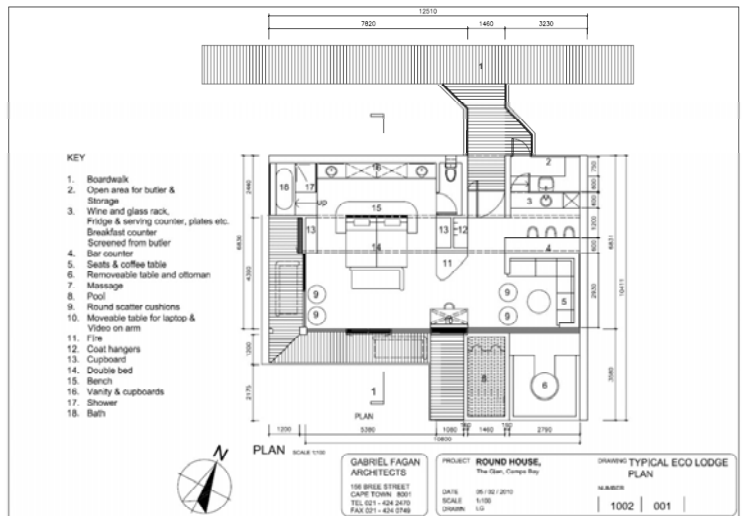


JOB NUMBER	1002
PROJECT	Round House Eco Lodge
PROJECT TYPE	Residential
LOCATION	Latitude: -33.943591° Longitude: 18.384906° The Glen, Camps Bay, Cape Town.
YEAR	2010
CLIENT	
COST	Not constructed yet
AWARD	None
PUBLICATION/s	None
DOCUMENTATION	

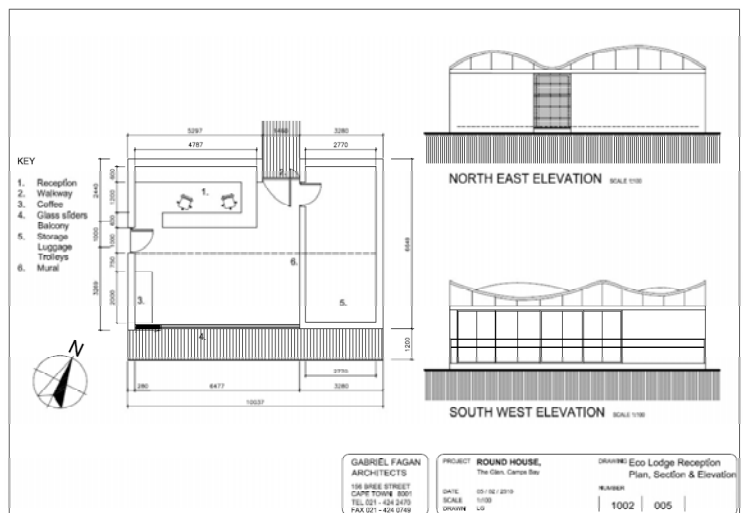
Sketch plans



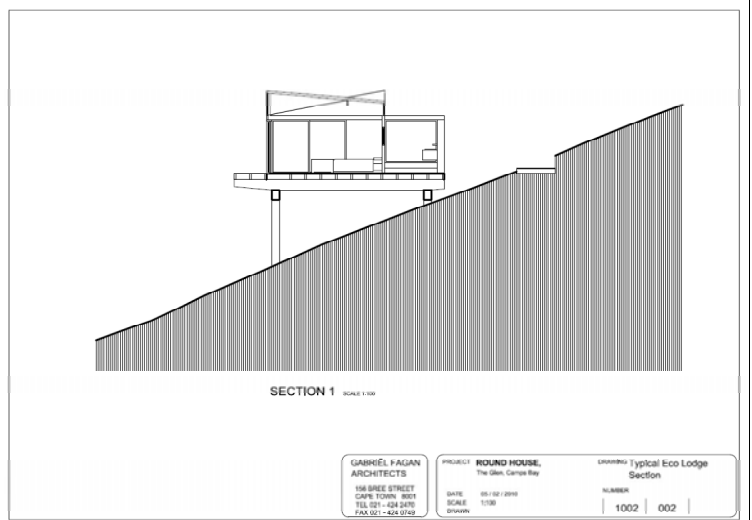
Perspective view of Eco Lodge.



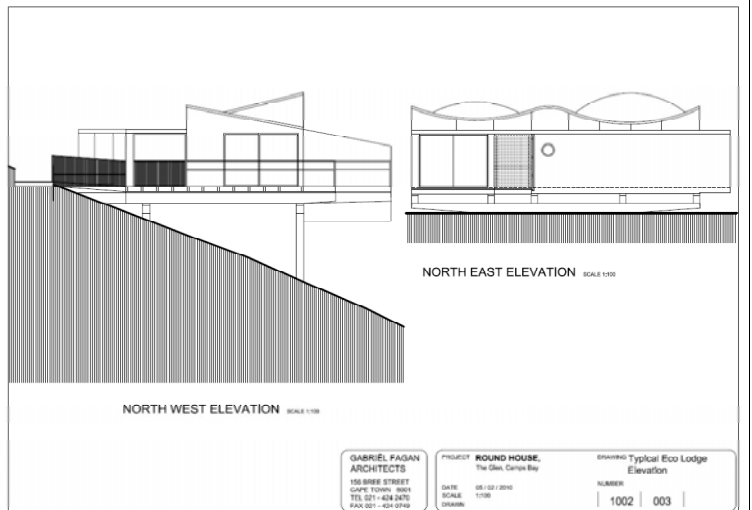
Typical Eco Lodge plan. Drwg. No.1002-001 (pdf).



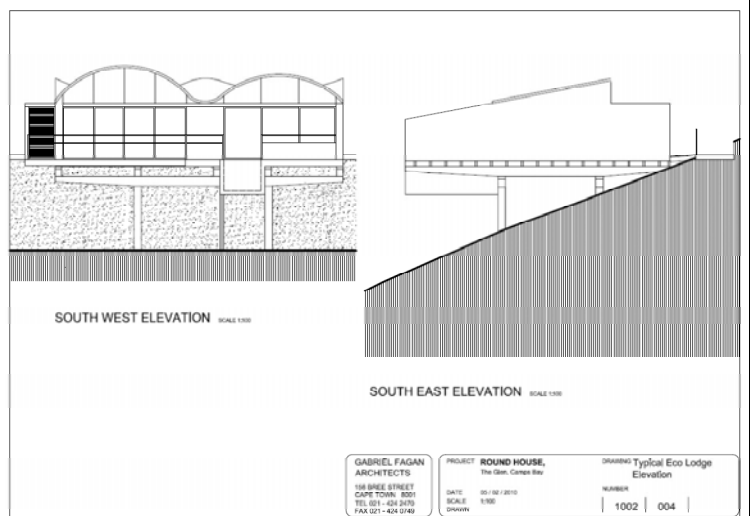
Eco Lodge reception. Plan section and elevation. Drwg. No.1002-005 (pdf).



Typical Eco Lodge section. Drwg. No.1002-002 (pdf).



Typical Eco Lodge elevations. Drwg. No.1002-003 (pdf).



Typical Eco Lodge elevations. Drwg. No.1002-004 (pdf).



Photographs of the model (undated).



Plasticine model (undated).

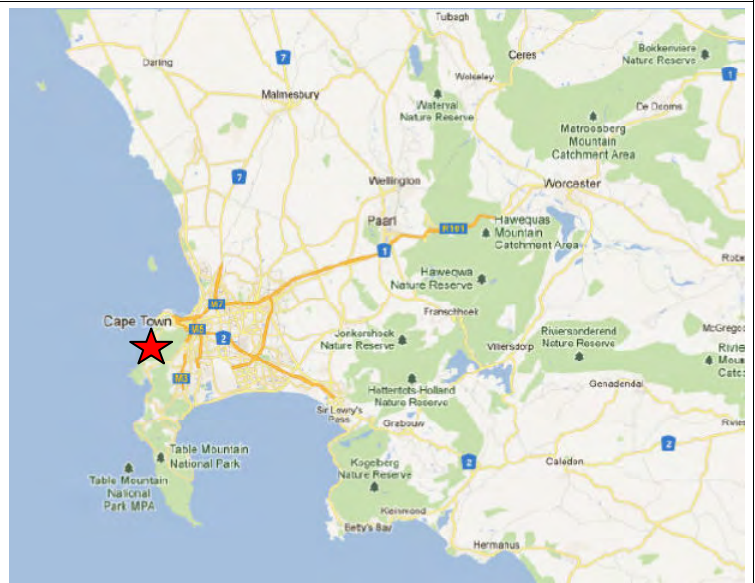
13.6.27: HOUSE STRONG



HOUSE STRONG



Fagan on site with client (Fagan archive, undated)



Map of the Western Cape. Red star indicates location of house (<http://maps.google.co.za/> Accessed 25/04/2012 and amended by author).



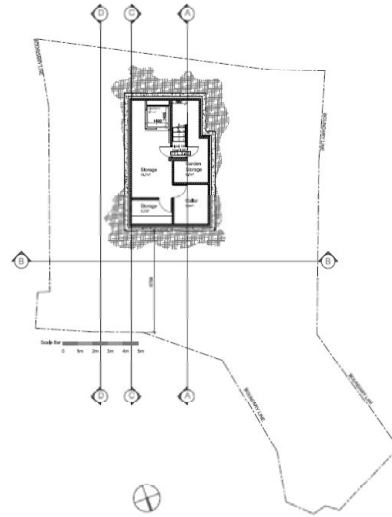
JOB NUMBER	1014
PROJECT	House Strong
PROJECT TYPE	Residential



LOCATION	Latitude: -33.959840° Longitude: 18.374156° Beta Close, Bakoven
YEAR	2010
CLIENT	Strong
COST	Not constructed yet
AWARD	None
PUBLICATION/s	None
DOCUMENTATION	

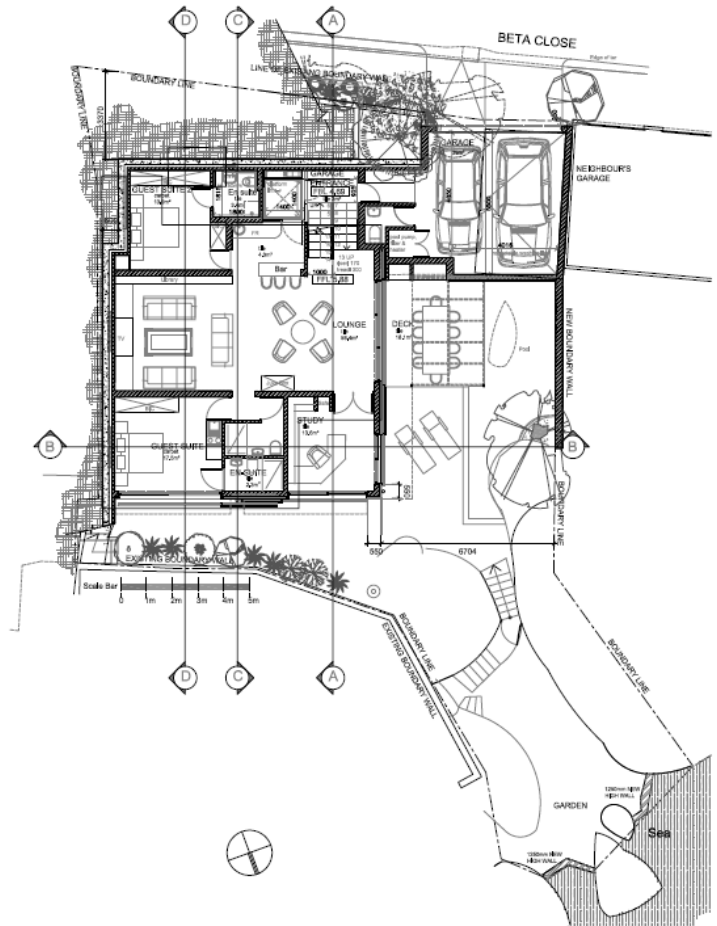


Sketch plans



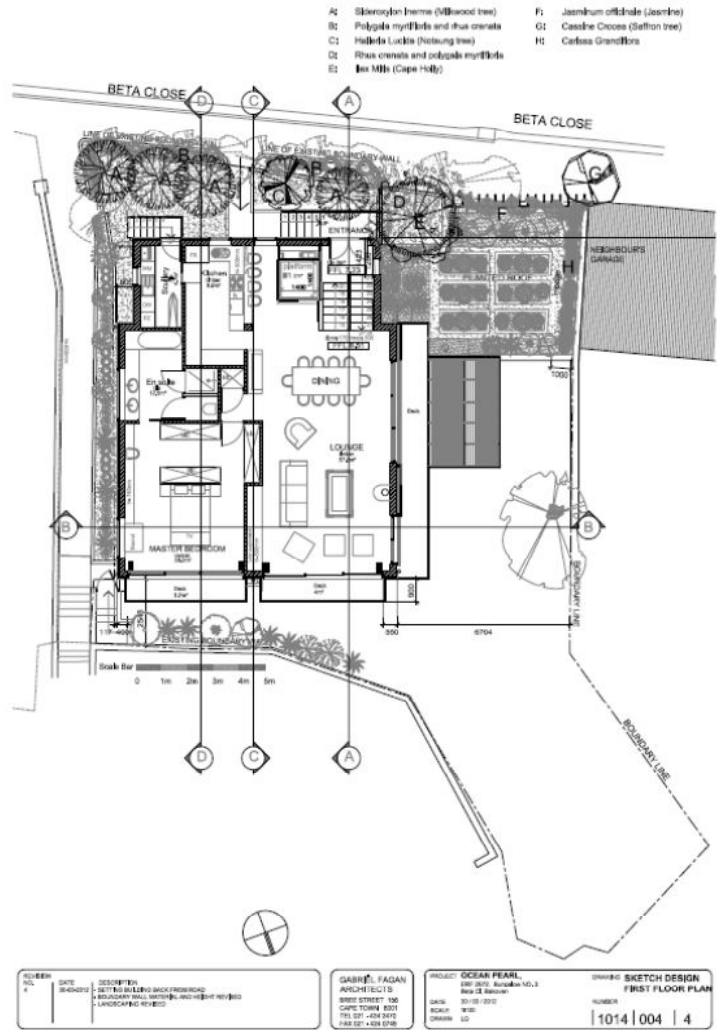
PROJECT NO. 1014-002 ARCHITECTS 1014-002 4	OCEAN PEARL 1014-002 4	SKETCH DESIGN 1014 002 4
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Basement plan. Drwg. No.1014-002 30/03/2012 (pdf)

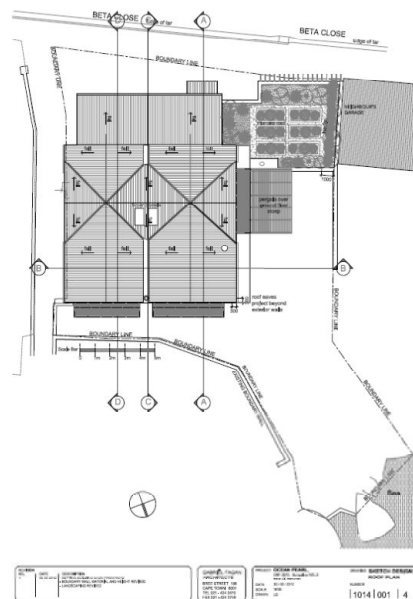


REVISION NO. 4 DATE 30-03-2012 DESCRIPTION - SETTING BUILDING BACK FROM ROAD - REVISION WALLS, DOORS AND WINDOW - LANDSCAPING REVISED	GABRIEL FAGAN ARCHITECTS 8800 STREET 106 CAPE TOWN 8001 TEL: 021-424 5762 FAX: 021-424 5768	PROJECT OCEAN PEARL 1014-002 003 4 DATE 30/03/2012 SCALE 1:100 DRAWN LG	DRAWING SKETCH DESIGN GROUND FLOOR NUMBER 1014 003 4
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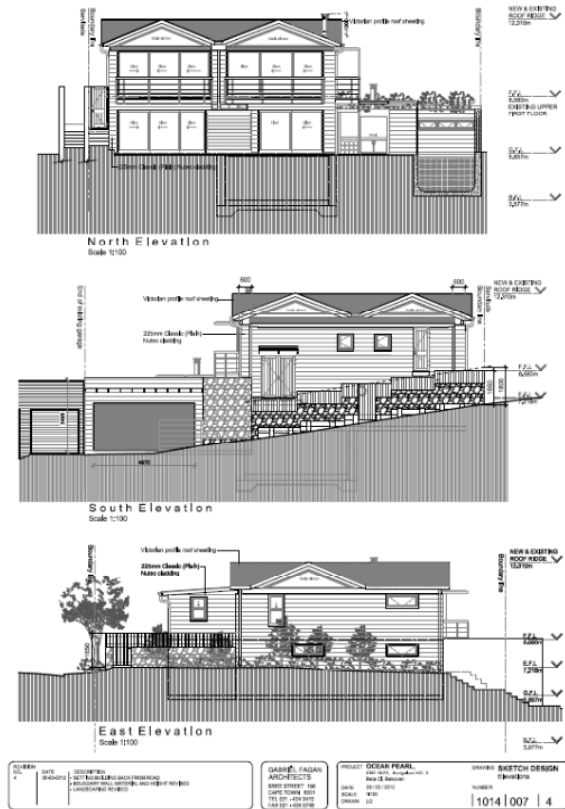
Basement plan. Drwg. No.1014-003 30/03/2012 (pdf).



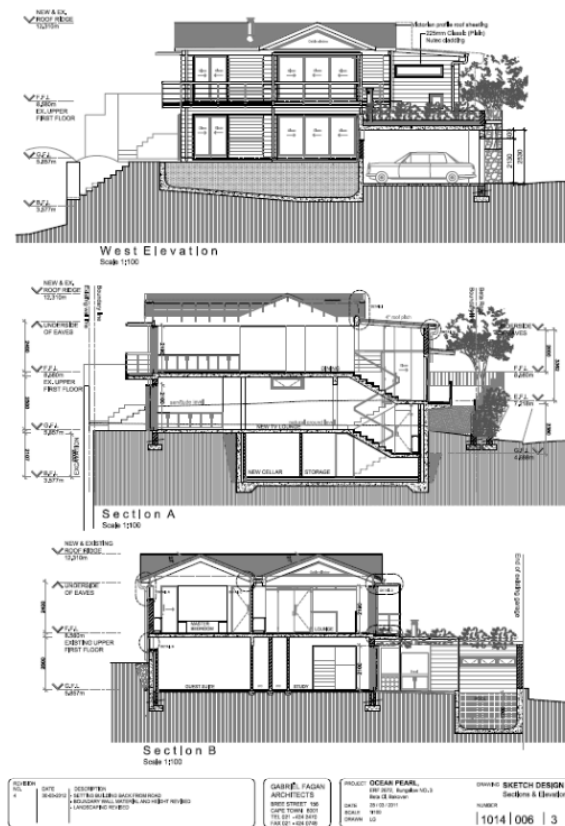
Basement plan. Drwg. No.1014-004 30/03/2012(pdf).



Roof plan. Drwg. No.1014-001 30/03/2012 (pdf).



Elevations. Drwg. No.1014-007 30/03/2012 (pdf).

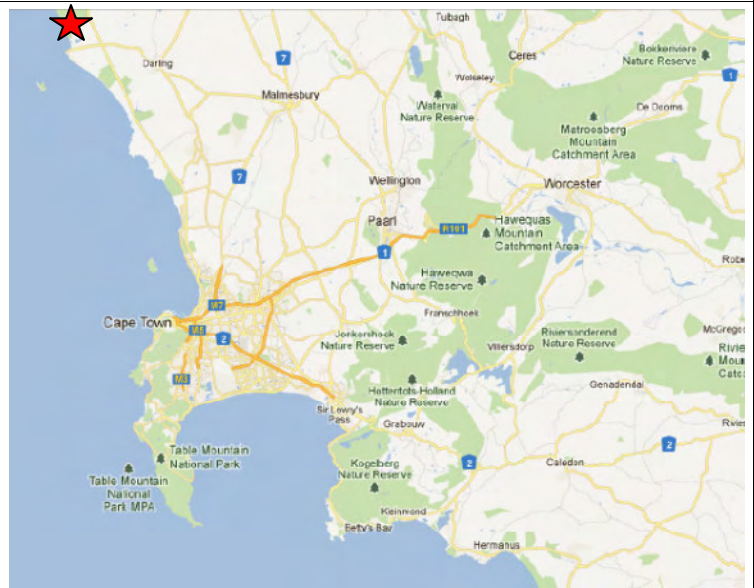
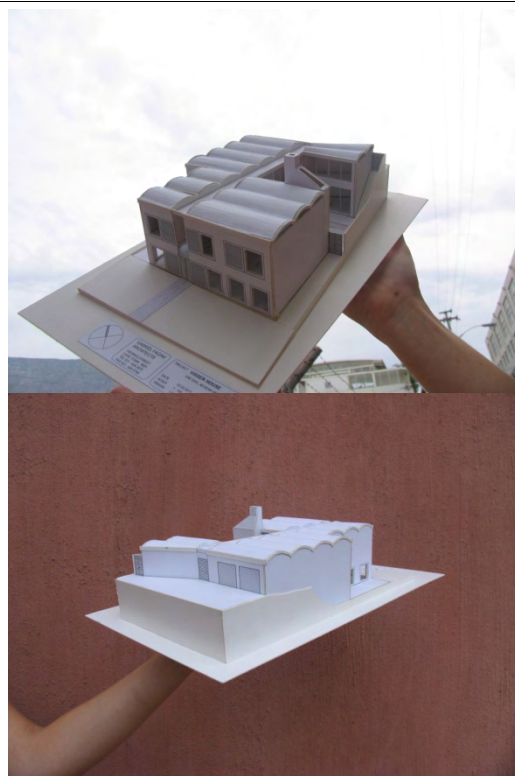


Sections. Drwg. No.1014-008 30/03/2012 (pdf).



Photographs of model (Fagan archive, 2012).

13.6.28: HOUSE VISSER



Map of the Western Cape. Red star indicates location of house (here slightly off map to the north)

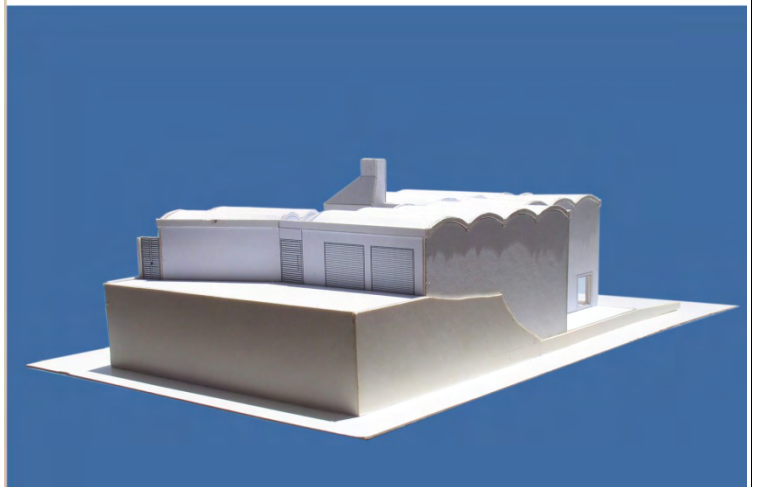
(<http://maps.google.co.za/> Accessed 25/04/2012 and amended by author).



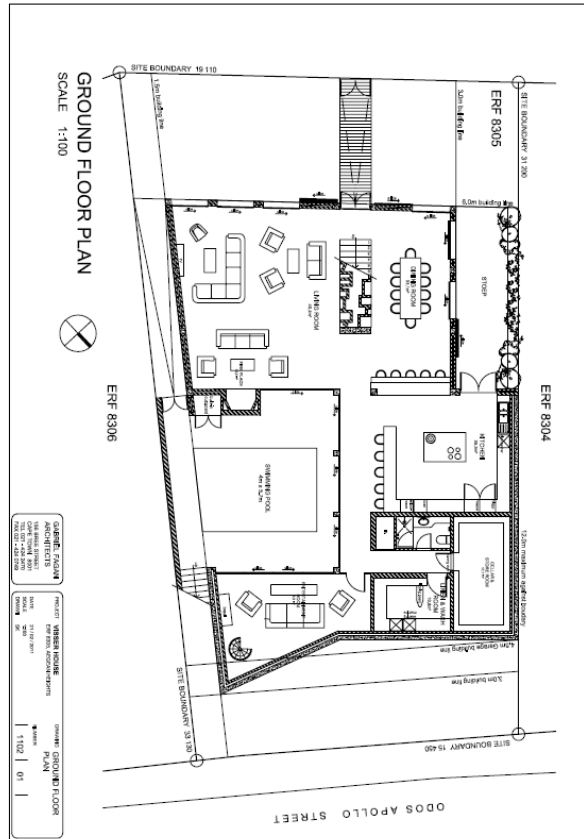
JOB NUMBER	1102
PROJECT	House Visser
PROJECT TYPE	Residential
LOCATION	Latitude: -33.043745° Longitude: 18.037169° Odos Apollo Street, Langebaan
YEAR	2009
CLIENT	Visser
COST	Not constructed yet
AWARD	None
PUBLICATION/s	None

DOCUMENTATION

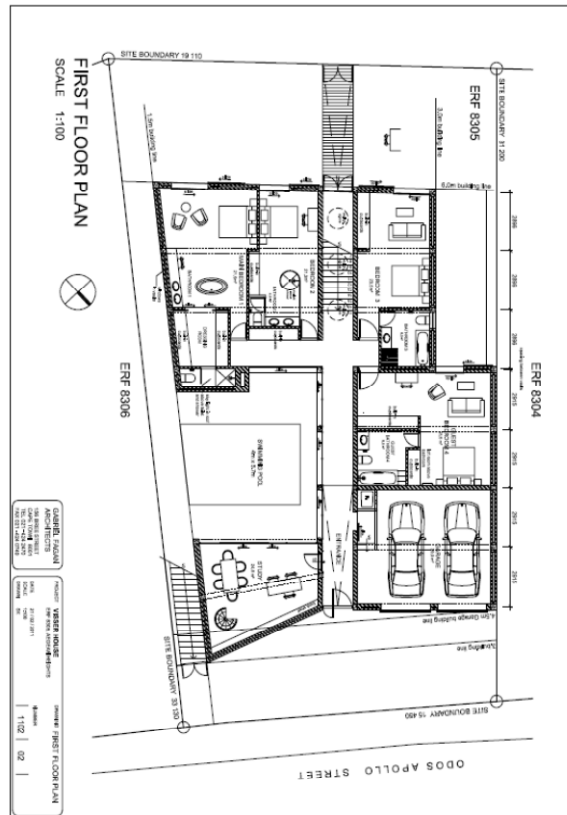
Sketch plans



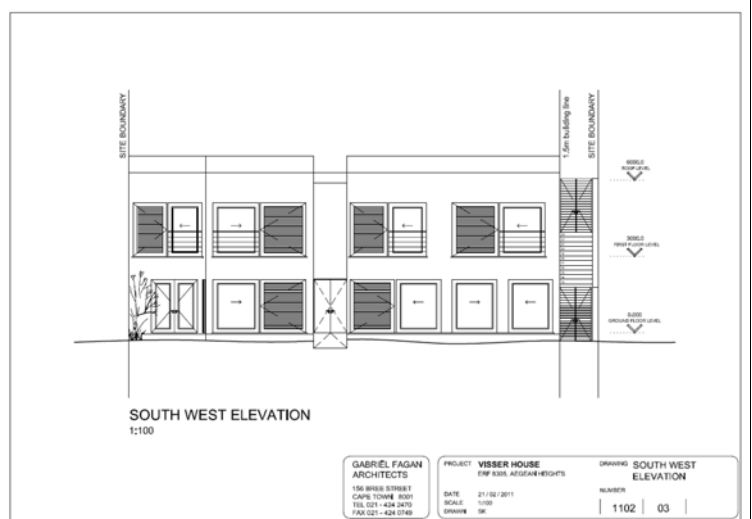
Photographs of model (undated).



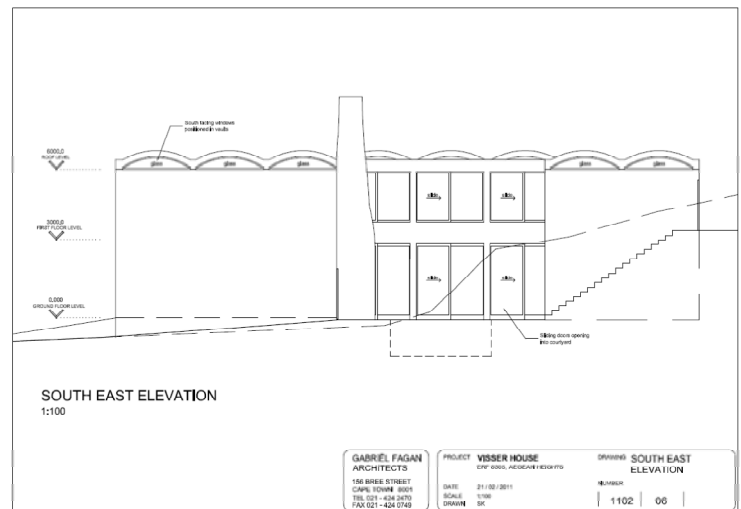
Ground plan. Drwg. No.1102-01 21/02/2011 (pdf).



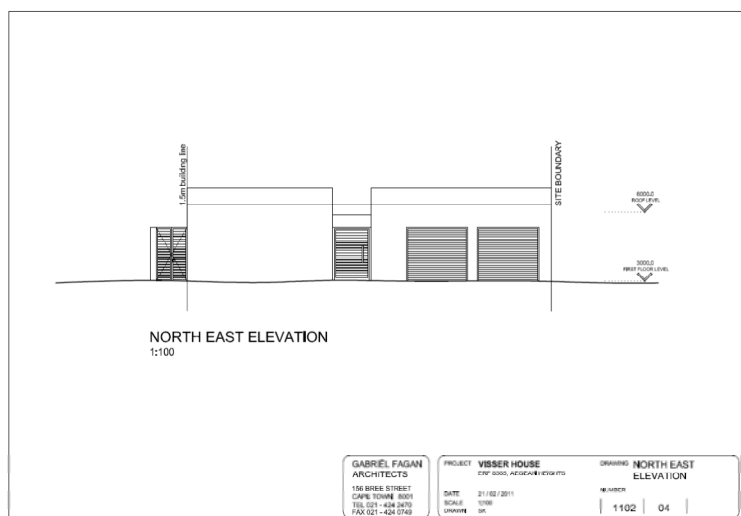
Ground plan. Drwg. No.1102-02 21/02/2011 (pdf).



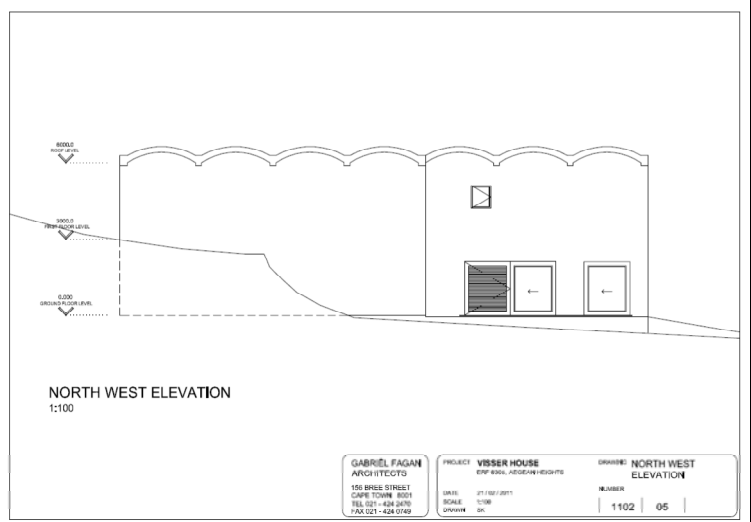
South west elevation. Drwg. No.1102-03 21/02/2011 (pdf).



South east elevation. Drwg. No.1102-06 21/2/2011 (pdf).



North east elevation. Drwg. No.1102-04 21/2/2011 (pdf).



North west elevation. Drwg. No.1102-05 21/2/2011 (pdf).

13.2.29: VAN DER LINDE



Photographs of model (Fagan archive)



Map of the Western Cape. Red star indicates location of house (<http://maps.google.co.za/> Accessed 25/04/2012 and amended by author).



JOB NUMBER	1102
PROJECT	House Van der Linde
PROJECT TYPE	Residential
LOCATION	Latitude: -34.194493° Longitude: 22.132229° 53 Maranatha Street, Mossel Bay
YEAR	2011
CLIENT	Van der Linde
COST	Not constructed yet
AWARD	None
PUBLICATION/s	None

DOCUMENTATION

Concept

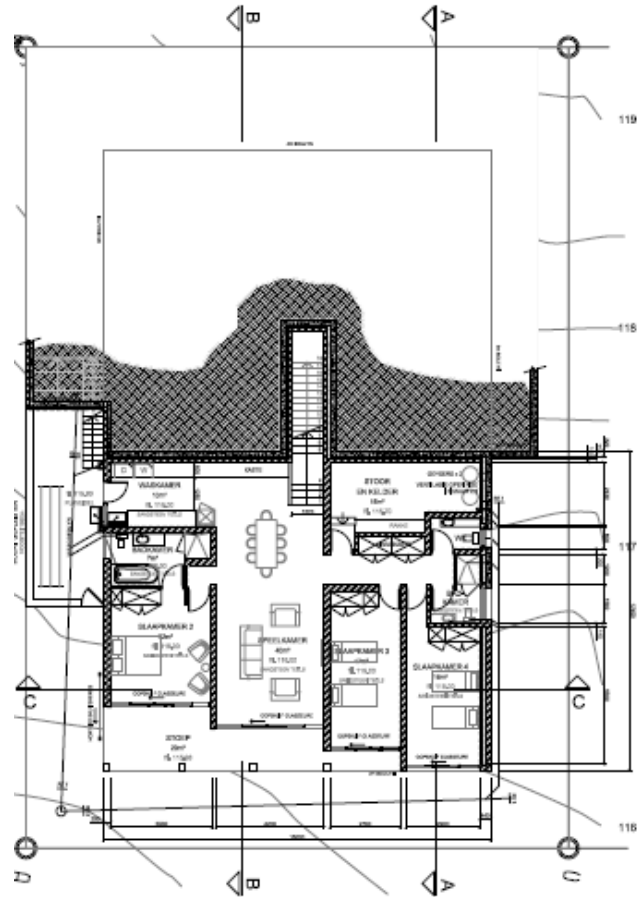


Fagan's sketch (undated).



Model options (09 May 2012).

Sketch plans

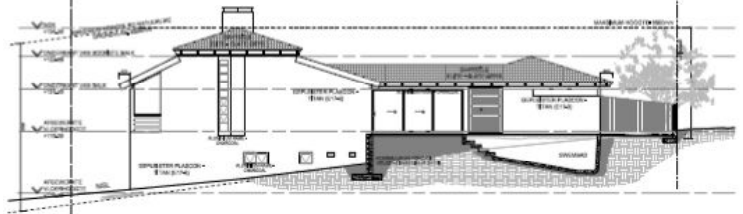


Laergrondvloerplan
Skaal 1:100

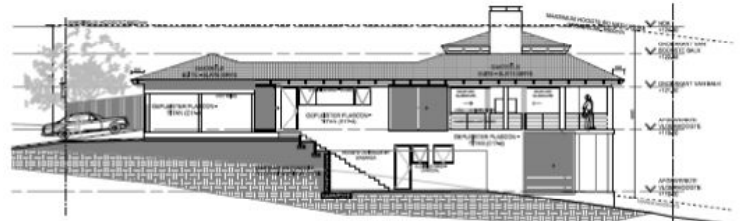
Lower ground floor plan. Drwg. No.1104-002 02/04/2012 (pdf).



Suid-aansig
Skaal 1:100



Oos-aansig
Skaal 1:100



Wes-aansig
Skaal 1:100

Elevations Drwg. No.1104-002 02/04/2012 (pdf).



Photographs of model (undated).