Chapter 9

FORMAL TENSIONS AND MEDIATIONS

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 heterotrophia 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 heterotrophia 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 rules 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

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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 may similarities in spatial definition, experience and movement (see Fig. 9.2).

![Fig. 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).](image)

9.2. FORM AND CONTEXT

Although 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 beskromd 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.


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” exhibition 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).

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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.
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.
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.

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”.

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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 hut\(^{238}\) (see Fig. 9.7).

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\(^{237}\) 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.
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).


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.
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.

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.

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.


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.

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 Johnson\textsuperscript{239} (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".

\textsuperscript{239} See Appendix J.
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.
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.

![Diagram](image)


### 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)
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.
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.

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 allermins 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 kontinuiteit 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.


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.

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.