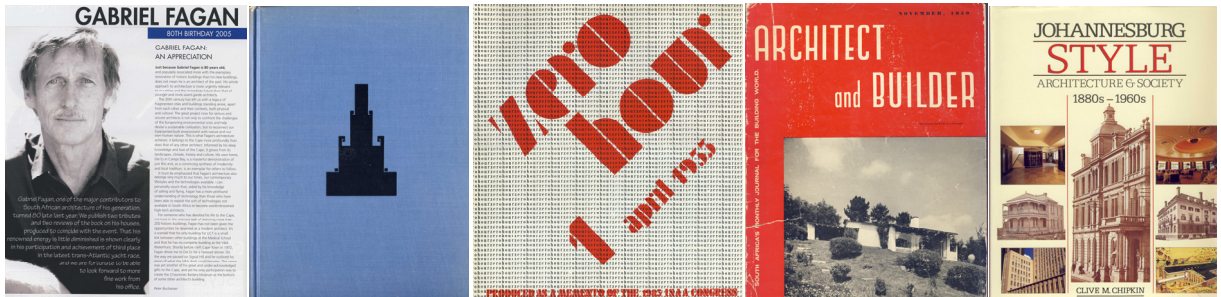


Chapter 2



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.

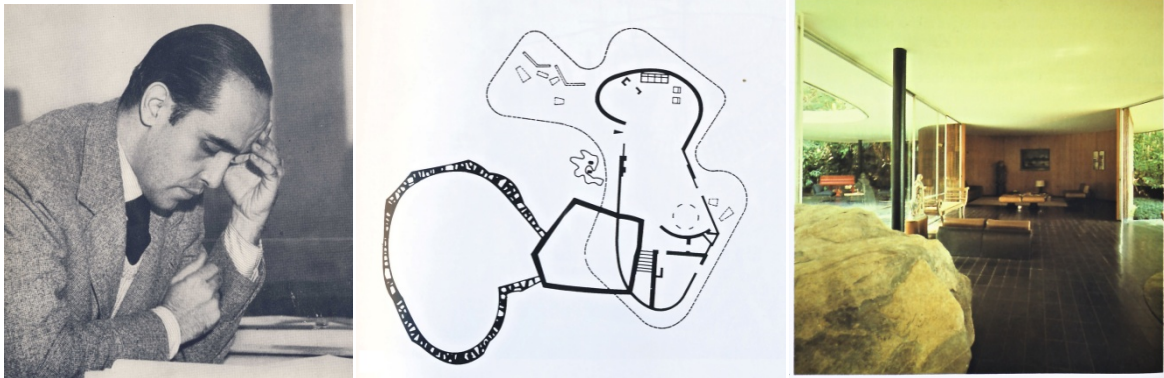


Figure 2.3. Top left: Oscar Niemeyer (Papadaki, 1950: inside cover). Middle and right: Plan and interior view of Niemeyer's Canoas house, Rio de Janeiro, 1953-4 (Curtis, 1996:499).

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.

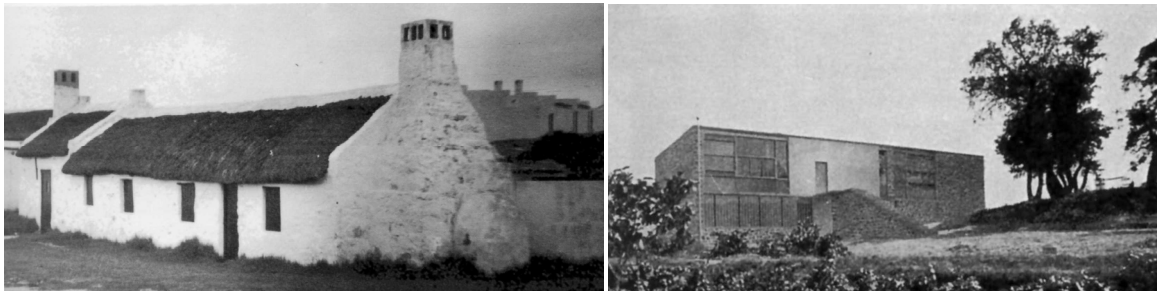


Figure 2.7. Left: Extended rectangular cottage at Waenhuiskrans (Walton, 1997:59). Right: Villa de Madame de Mandrot, Le Pradet by Le Corbusier and Jeanneret (1929) (St. John Wilson, 2007:161).

'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).

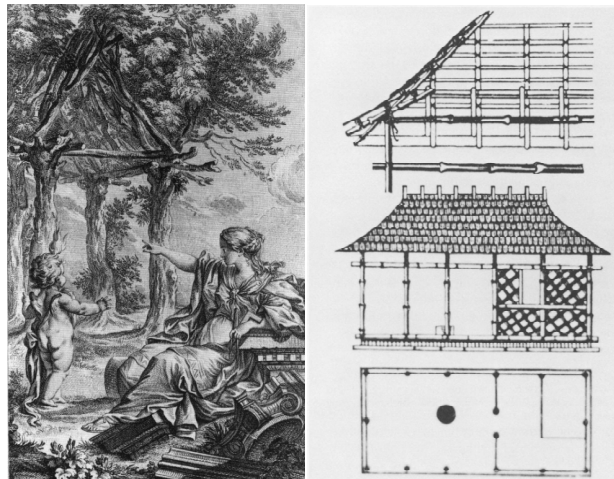


Figure 2.8. **Left:** The primitive hut. Frontispiece from the second edition of Abbé Laugier's *Essai sur l'architecture*, engraved by Ch. Eisen, 1755 (Frampton, 1995:31). **Right:** The Caribbean hut displayed at the Great Exhibition portraying architecture's four industrial motives: ceramic hearth 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).

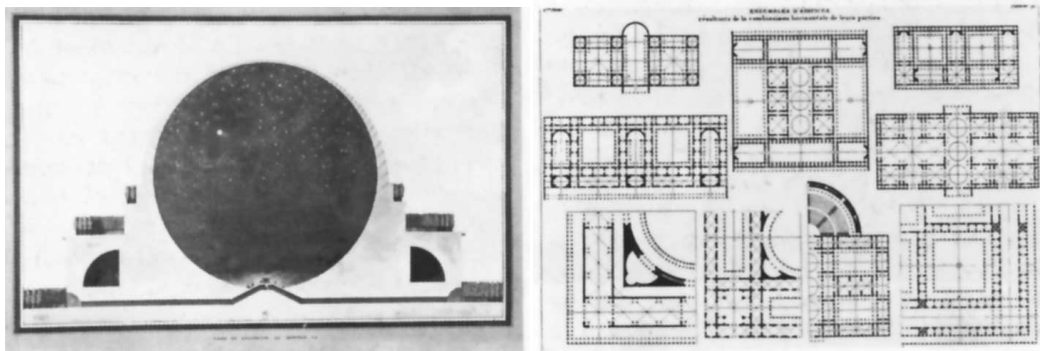


Figure 2.9. Left: Boullée's project for a cenotaph for Isaac Newton c. 1785. Right: Durand's plan permutations (both Frampton, 1992b:15).

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.

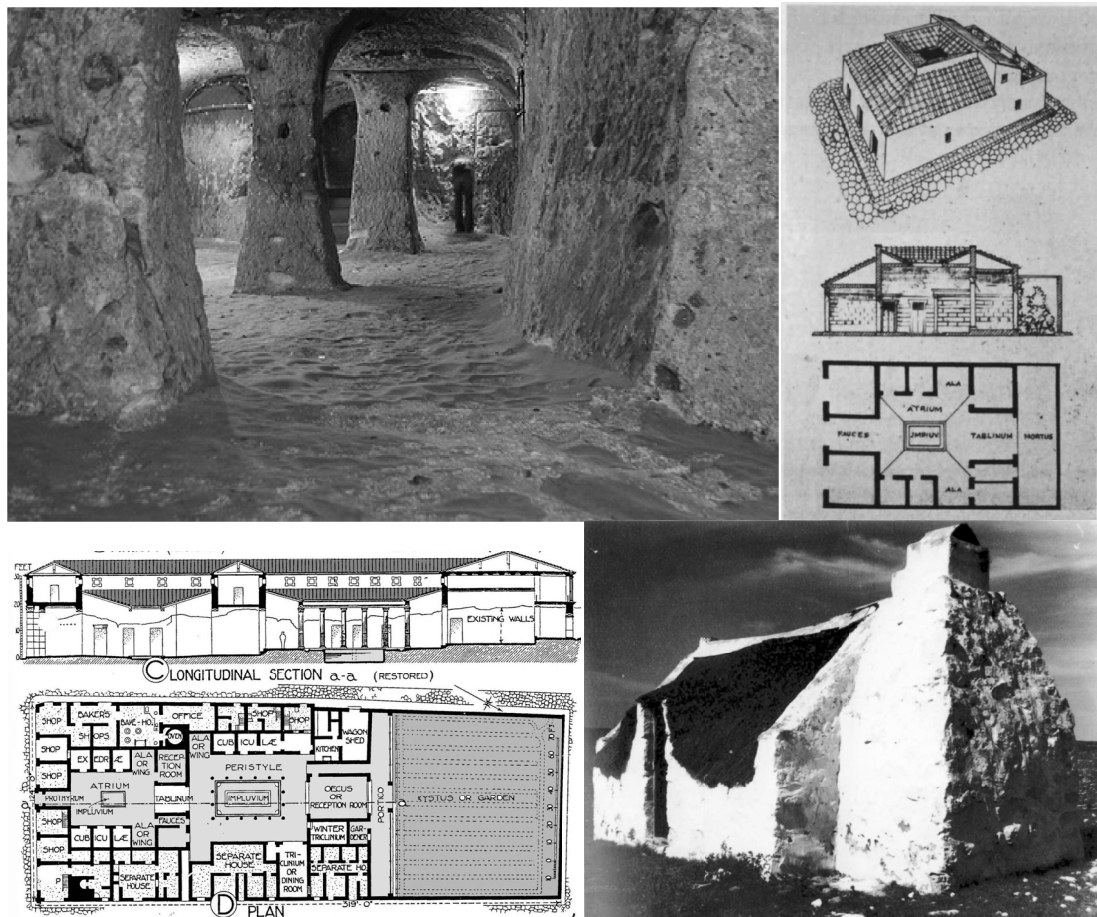


Figure 2.11. Top left: Cave: Derinkuyu underground city in Turkey dating from the 8th to 7th century B.C. (<http://www.istanbuldiary.com/images/turkey/tours/cappadocia/Derinkuyu.jpg> [Accessed 1/05/2012]). Top Right: Covered courtyard. Pompeii, Italy. Early Roman house c.250 B.C. (Lewcock, 2006:208). 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.

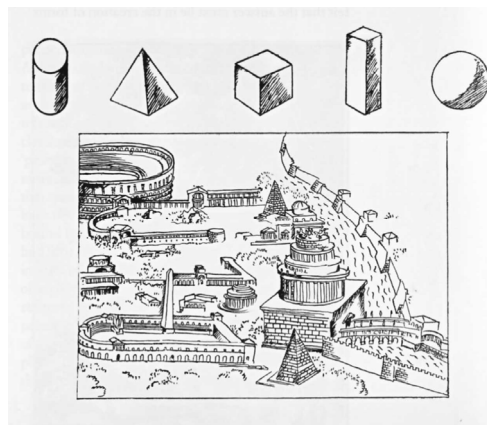


Figure 2.12. Le Corbusier's sketch of primary forms alongside a view of ancient Rome (Curtis, 1996:28).

— 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.

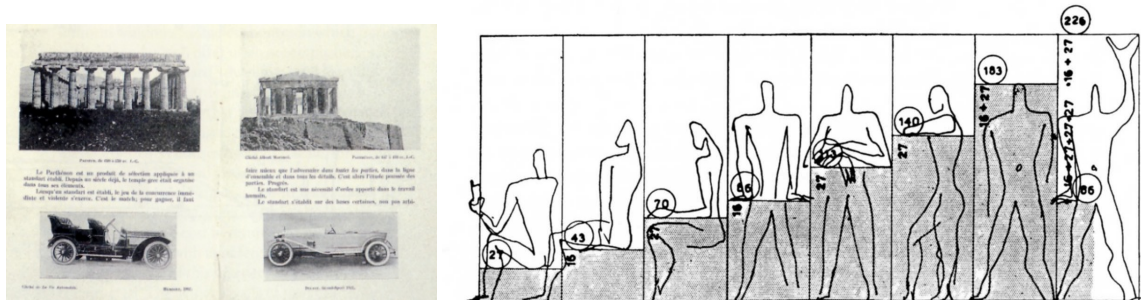


Figure 2.13. Left: Greek temples and cars from *Vers Une architecture*, 1923 (Curtis 1996:169). Right: Le Corbusier's Modulor Man (1946) (Frampton, 2001:162).

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).

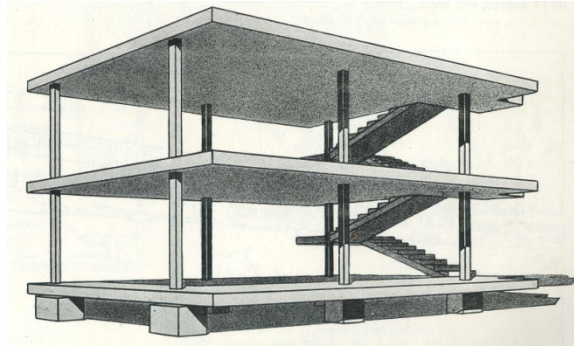


Figure 2.14. The Piloti system (Le Corbusier & Jeanneret, 1943:23).

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.