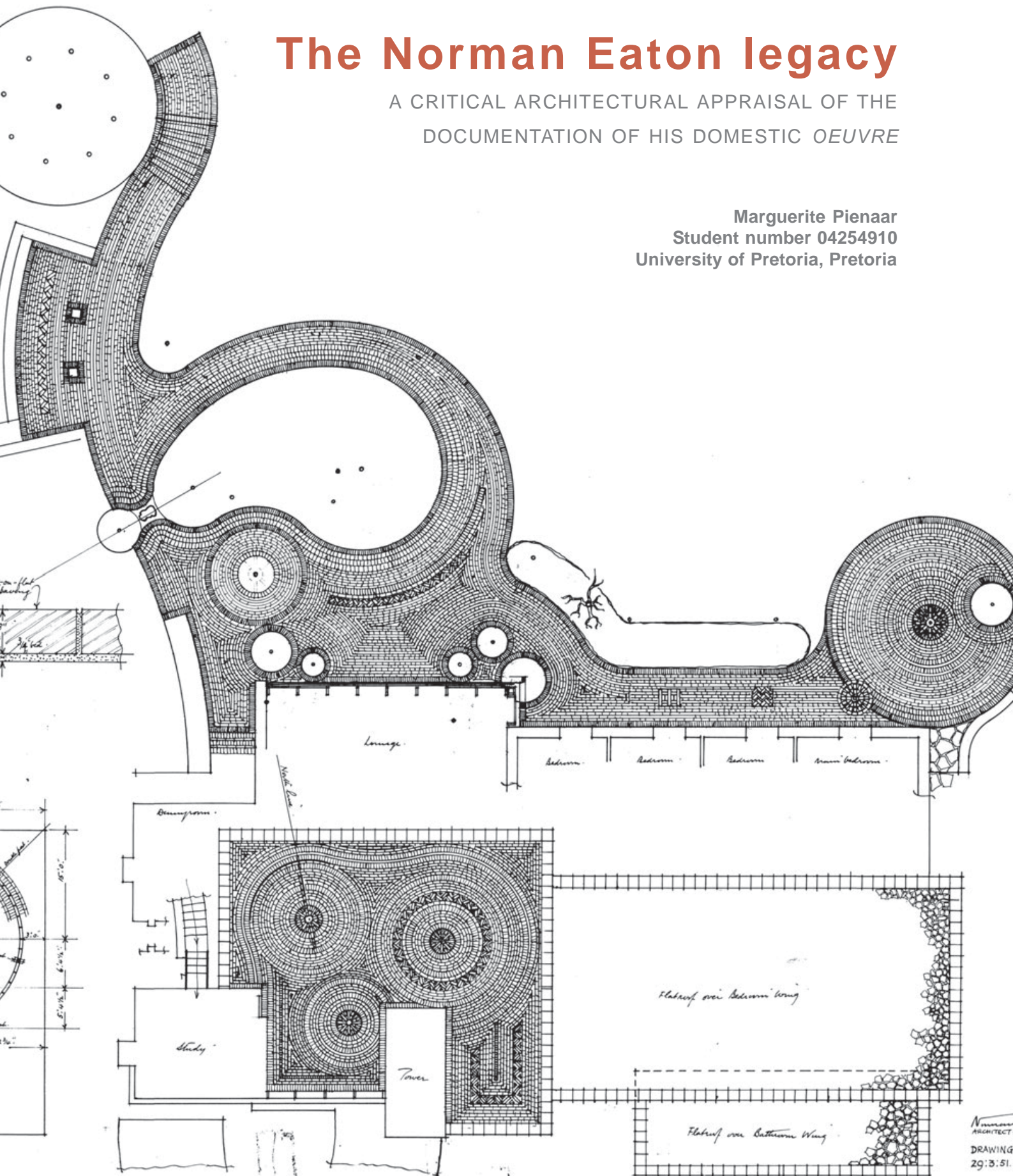
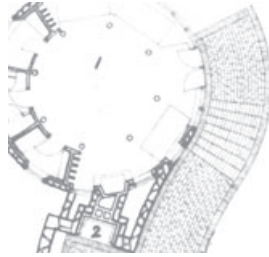


The Norman Eaton legacy

A CRITICAL ARCHITECTURAL APPRAISAL OF THE
DOCUMENTATION OF HIS DOMESTIC *OEUVRE*

Marguerite Pienaar
Student number 04254910
University of Pretoria, Pretoria





Submitted by Marguerite Pienaar

Submitted in fulfillment of part of the requirements for the degree in Master's in Architecture (MArch) in the Department of Architecture, Faculty of Engineering, Built Environment and Information Technology

University of Pretoria
Pretoria
November 2013

Supervisor: Prof Roger Fisher



DECLARATION

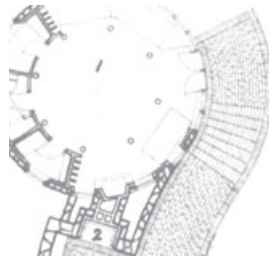
IN ACCORDANCE WITH Regulation (4e) of the General Regulations (G.57) for dissertations and theses, I declare that this dissertation, which I hereby submit for the degree **Masters in Architecture** in the **Department of Architecture in the Faculty of Engineering, Built Environment and Information Technology**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

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

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

The text of this dissertation amounts to **48 347** words, with an additional **12 559** words in appendices.

Marguerite Pienaar (November 2013)



ABSTRACT

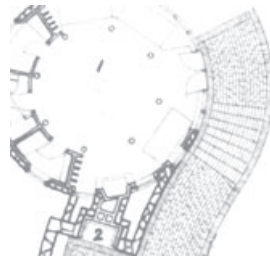
The documented legacy of South African architect Norman Musgrave Eaton (1902–1966), as preserved at the University of Pretoria, provides the material for a contemporary analysis and extrapolation of his domestic *oeuvre* through the construction of a biographical-disciplinary context and chronology. Why and how Eaton's domestic architecture expresses its lineage of forms, space, material, and detail are explored in this study.

Eaton's architectural *oeuvre* demonstrates a rare encounter between the Modern Movement and Africa. The residential architecture of Eaton, he being based in Pretoria, draws strongly on the African monumental past, while denoting both a regional and universal consciousness. Local influences are drawn from diverse sources: Cape Dutch architecture, Great Zimbabwe, Eastern Africa and the unself-conscious architectural endeavours of the Ndebele.

Through the systematization of his records, the researcher is able to set up a biography within context in order to capture the critical moments in Eaton's development and his designer's mind. The chronological study of his domestic drawings further allows for the tracing of African and other influences in relation to his travels and their translation into architectural expression. Typological plan compositions and motifs emerge with clarity to aid in providing a critical appraisal of his domestic work.

Key words

Documentary legacy, domestic *oeuvre*, Modern Movement, Africa, systematization, biographical-disciplinary context, chronology, analysis, lineage, motif



ACKNOWLEDGEMENTS

Thank you to the following list of individuals for your valuable contributions, small or big:

Hanli Deysel

Prof Roger Fisher (Department of Architecture, University of Pretoria)

Prof Karen Harris (Department of Historical and Heritage Studies, University of Pretoria)

Clinton Harrop-Allin

Prof 'Ora Joubert

Karlien van Niekerk (Department of Architecture, University of Pretoria)

Ria van der Merwe (Archives, University of Pretoria)

Audrey Williams

My parents, Pierre and Marie Le Roux

Finally, Morné Pienaar, without whom I would not have been able to do any of this.

Contents

	LIST OF FIGURES	xi
1.	THE PROBLEM AND ITS SETTING	1
1.1.	Intent	1
1.2.	Background	1
	1.2.1. Personal interest	1
	1.2.2. Eaton records	1
	1.2.3. Consequence	2
1.3.	Main premise	3
1.4.	Statement of the research problem	3
1.5.	Delineation and clarifications	4
	1.5.1. Delimitations	4
	1.5.2. Definitions	4
	1.5.2.1. Domestic <i>oeuvre</i>	4
	1.5.2.2. Modern Movement	4
	1.5.2.3. Records	4
	1.5.2.4. Archive	5
	1.5.2.5. Repository <i>versus</i> UP Repository	5
	1.5.3. Archivists and archival processes	5
1.6.	Editorial conventions	6
1.7.	Research methodology & techniques	7
1.8.	Relevance	7
1.9.	Outline of the study	8
2.	CONTEXTUALIZATION	
	CULTURAL INHERITANCE OF PLACE	11
2.1.	Architectural setting	11
	2.1.1. Earliest influences	11
	2.1.2. Eaton and the first wave of the Modern Movement in South Africa	12
	2.1.3. Eaton and the second wave of the Modern Movement in South Africa	15
	2.1.4. Pretoria Regionalism	17
2.2.	An Inheritance of place	18
	2.2.1. Place	18
	2.2.2. Material and structure	19
	2.2.3. Planning	20
2.3.	African lineage	21
2.4.	Summary of the contextual setting	26
3.	TRANSLATION TO AN EVOLUTION OF FORM, SPACE AND ‘MOTIF’	27
3.1.	1930–1940: The pre-war period	28
	1928	29
	1930	29
	1932	31

	1933	33
	1934	36
	1935	47
	1936	55
	1937	59
	1938	63
	1939	73
	1940	79
3.2.	1941–1945 The War Period	84
	1941	84
	1943	85
	1944	91
	1945	91
3.3.	1946–1966 The Post-War Period	92
	1948	95
	1949	103
	1951	109
	1952	109
	1953	109
	1954	111
	1956	113
	1957	113
	1958	115
	1959	115
	1960	116
	1961	116
	1962	119
	1963	123
	1964	123
	Projects without dates	125
3.4.	Summary of the three periods defining Eaton's domestic <i>oeuvre</i>	127
	3.4.1. Summary: 1930–1940 Pre-War Period	127
	3.4.2. Summary: 1941–1945 War Period	129
	3.4.3. Summary: 1946–1966 Post-War Period	129
4.	VISUAL DISTILLATION OF MOTIF, AFRICAN TRANSLATION AND TYPOLOGICAL LINEAGE	131
4.1.	Visual distillation of motifs	131
4.2.	African translations	149
4.3.	Plan as generator: typological lineages	157
	4.3.1. Typology: Letter-type	158
	4.3.2. Typology: Centralized prism	158
	4.3.3. Typology: Centrifugal prism	159
	4.3.4. Typology: Additive rectangle	160
	4.3.5. Typology: Village typology	160
4.4.	Summary of key findings from the distillation of motifs, African lineage and typological lineage	169
	4.4.1. Summary of findings: Visual distillation of motifs	169
	4.4.2. Summary of findings: African translations	169
	4.4.3. Summary of findings: Typological lineage	170

5.	RECAPITULATION, CONCLUSIONS AND RECOMMENDATIONS	171
5.1.	Recapitulation	171
5.2.	Conclusions	173
5.3.	Contributions	173
5.4.	Recommendations	174
6.	LITERATURE OVERVIEW	177
6.1.	Cited works	177
6.2.	Consulted references	180
	APPENDIX A: TIMELINE AND LIST OF PROJECTS	183
	APPENIDIX B: DRAMATIS PERSONAE	198
	Norman Musgrave Eaton (1902–1966)	198
	Alvar Aalto (1898–1976)	199
	Sir Herbert Baker (1862–1946)	199
	Walter Battiss (1906–1982)	200
	Esias Bosch (1923–2010)	200
	Bernard Cooke (1910–2011)	200
	Robert Cole Bowen (1904–1976)	201
	Douglas Maurice Cowin (1911– ?)	201
	Michel de Klerk (1884–1923)	201
	Karl Ehn (1884–1957)	201
	Gabriël Fagan (1925–)	201
	Alan Fair (1933–1977)	201
	John Fassler (1910–1971)	202
	Mira Fassler-Kamstra (1938–)	202
	Bram Fischer (1908–1975)	202
	Walter Gropius (1883–1969)	202
	Norman Leonard Hanson (1909–1991)	202
	Clinton Harrop-Allin (1936–)	203
	André Hendrikz (birth date unknown)	203
	Willem de Sanderes Hendrikz (1910–1959)	203
	Henkel Irmin (1921–1977)	203
	Karel Jooste (1925–1971)	203
	‘Ora Joubert (1959–)	204
	Le Corbusier/Charles-Édouard Jeanneret-Gris (1887–1965)	204
	George Esselmont Gordon Leith (1886–1965)	204
	Tobie J. Louw (unknown)	204
	Eugène Nielen Marais (1871–1936)	205
	Rex Distin Martienssen (1905–1942)	205
	Roberto Burle Marx (1909–1994)	205
	William Gordon McIntosh (1904–1983)	205
	Professor Adriaan Louw Meiring (1904–1979)	206
	Erich Mendelsohn (1887–1953)	206
	Gerard Leendert Pieter Moerdyk (1890–1958)	206
	Richard Neutra (1892–1970)	206

X THE NORMAN EATON LEGACY

Oscar Niemeyer (1907–2012)	207
Aubrey Victor Nunn (1905–?)	207
Geoffrey Eastcott Pearse (1885–1968)	207
Auguste Perret (1874–1954)	207
Pablo Picasso (1881–1973)	208
Jacobus Hendrik Pierneef (1886–1957)	208
Alexis Preller (1911–1975)	208
Gustav Schoeman Preller (1875–1943)	208
Peter Rich (1954–)	208
Henry Hobson Richardson (1838–1886)	209
Carlo Scarpa (1906–1978)	209
Robert Gustav Schmickl (1903–1977)	209
Laurence Vincent Scully (1922–2002)	209
Jan Christiaan Smuts (1870–1950)	209
Hellmut Stauch (1910–1970)	210
Louis Sullivan (1856–1924)	210
Mies van der Rohe (1886–1969)	210
Anton van Wouw (1862–1945)	210
Jan van Wijk (1926–2006)	211
Frank Lloyd Wright (1867–1959)	211
APPENDIX C: GLOSSARY OF ARCHITECTURAL TERMS	212
Arts & Crafts	212
Baker School	212
Brazil Builds	212
Cape Dutch	213
CIAM	213
Critical Regionalism (also see ‘Regionalism’)	214
Expressionism (1910–1925)	214
Functionalism	214
The International Style	215
Johannesburg Vernacular	215
Johannesburg Vernacular: Institutional (1947 to 1965)	215
Johannesburg Vernacular: Residential (1950s to 1970s)	216
Modern architecture	217
Modern Movement: Internationally	217
Modern Movement in South Africa: First Wave (1925–1942)	218
Modern Movement in South Africa: Second Wave (1942 to mid-sixties)	219
Pretoria Regionalism – see the ‘Third Vernacular’	220
Regionalism	220
Romantic Nationalism	220
The Third Vernacular	220
The Transvaal Group	221
Streamline <i>Moderne</i>	221
<i>zero hour</i>	221
APPENDIX D: EXTRACTS FROM EXAMINER’S REPORT AND STUDENT’S RESPONSE	222

List of figures

- Figure 1: An extract from Eaton's 1944 Africa diary** (Diary entry 1944-01-18, Eaton Collection, UP Repository), showing 'Complexes of Native Dwellings seen from the Air' a few miles south west of Dodoma in Tanganyika (present day Tanzania). Formal characteristics presented by this drawing held in common established typological groupings recognizable in his domestic *oeuvre*. — 3
- Figure 2:** Redrawn project: **House Stellenberg**, Wynberg, Western Cape (1928).— 10
- Figure 3: 'Farmstead with Acacia trees'**, by Pierneef signed and dated 'JH Pierneef 1932' and indistinctly inscribed in pencil along bottom margin, woodcut on paper (19.7 x 24.8cm.) Image from the website of Christie's, the world's largest fine arts auction house.— 18
- Figure 4:** Elevation of the **Boyes House (1934)** by Eaton. Typical of drawings from this period, references to the landscape were less pronounced, but still showed an affinity to indigenous vegetation and human scale. Notice the scale of the house in relation to the trees (From: Eaton Collection, UP Repository).— 19
- Figure 5:** Eaton's sketch of the **Anderssen House (1949–50)** clearly demonstrates the horizontal development of his approach to the landscape, with blurred boundaries between nature and the man-made. Indigenous trees complete a canopy over the house (From: Eaton Collection, UP Repository).— 19
- Figure 6:** Drawing from Eaton's 1930 sketchbook, showing a marble column base at Ostia (From Eaton Collection).— 23
- Figure 7:** A sketch of a folding knife that Eaton had seen in an Indian store in Kitale, dated January 1944 (From Eaton Collection).— 23
- Figure 8:** An extract from Eaton's diaries, dated '9/7/41', showing a pot from the Lake Nyara area, Tanzania (From Eaton Collection) (Detail).— 23
- Figure 9:** Eaton's documentation of a Masai Manyatta from his 1944 diary (From Eaton Collection).— 24
- Figure 10:** An extract from Eaton's 1943 diary, showing sketches of weaving (From Eaton Collection) (Detail).— 24
- Figure 11:** Eaton's drawing of a Chembe dwelling, Lake Nyara, 1950.— 25
- Figure 12:** Extract from Eaton's diary — List of his architectural journals (Eaton Collection) (Detail).— 25
- Figure 13:** Extract from Eaton's diary on 1945-10-15 (Eaton Collection).— 25
- Figure 14: 'The Laurels' Cottage**, Mackenzie Street, Brooklyn, Pretoria (c.1930).— 30
- Figure 15: Farmstead for Mr Hill**, near Lunsklip, Transvaal (1932).— 32
- Figure 16: Cottage Collender**, Mackenzie Street, Brooklyn, Pretoria (1933).— 32
- Figure 17: Cottage Moggeridge**, Brooklyn, Pretoria (1933).— 34
- Figure 18: Cottage Boyes (initial proposal)**, corner of Clark and Pienaar Streets, Brooklyn, Pretoria (1933).— 34
- Figure 19: Cottage Smook**, Sunnyside, Pretoria (1933).— 34
- Figure 20: Dr von Sonn's house**, Pretoria (1934).— 36
- Figure 21:** Original sketch design of **House Boyes**, corner of Clark and Pienaar Streets, Brooklyn, Pretoria (1934).— 38
- Figure 22: The redrawn House Boyes** (1934) for the exhibition collection (see House von Sonn) without textures, reference to local building materials, human figure and trees.— 38
- Figure 23: House Kleyn**, corner of Edward Street and Premier Avenue, Waterkloof, Pretoria (1934).— 40
- Figure 24: Additions and Alterations to existing House Turvey**, Modderfontein, Zebediela, Transvaal (1934).— 40
- Figure 25:** Design development of the **Nigel houses** from centralized plans recalling Villa Schwob (1916) in plan, to cen-trifugal arrangements.— 42
- Figure 26:** Original centralized proposal for the **Nigel Housing prototype** dated: 6.9.34.— 42
- Figure 27:** Design development of the **Nigel housing prototype** (1934).— 42
- Figure 28:** Final proposal for the **Nigel Housing project** (1934), part of the redrawn projects of the 1937 exhibition.— 42
- Figure 29:** Final proposal for the **Nigel housing prototype**, part of the 1937-exhibition drawings (1934).— 42
- Figure 30:** Design development sketch, showing chevron patterning and recesses in brickwork, **House Gascoine** (1934).— 44
- Figure 31:** The original version of **House Gascoyne**, to be known as 'Sunways' off Ridge Road, Muckleneuk, Pretoria (1934).— 44
- Figure 32:** The redrawn version of **House Gascoine**, Pretoria (1934).— 44
- Figure 33: House Nicolson**,* Brooklyn, Pretoria (1934).

- Although the house was unplastered, the drawings show a smooth, plastered finish.— 46
- Figure 34:** Redrawn **House Nicolson**, Erf 609, Brooklyn, Pretoria (1934).— 46
- Figure 35:** **House Viljoen**, Berea Street, Muckleneuk, Pretoria (1934), showing the second series of sketch designs.— 46
- Figure 36:** **House Viljoen**, Berea Street, Muckleneuk, Pretoria (1934), redrawn for the exhibition.— 46
- Figure 37:** A thumbnail extract from the original drawing, showing the character of the new houses adjacent to the existing house for **R. Tosi**, Westend, Pretoria (1935).— 48
- Figure 38:** **House Barkham**, Troye Street, Muckleneuk, Pretoria (1935): The bottom drawing was included for the 1937-exhibition.— 48
- Figure 39:** **House Frommurze/Frommurzse/Mackenzie**, Brooklyn, Pretoria (1935): Note the 'disappearance' of the corridor on ground level, and the application of plants to all horizontal ledges. The drawing below is again a 'cleaner' redrawn version for the 1937 exhibition.— 50
- Figure 40:** **House Rademeyer***, Erf 527, Nicolson Street, Brooklyn, Pretoria (1935).— 50
- Figure 41:** Extract from the sketch design for **House Cordélie** for Mr Stoker*, John Street, Erf 351, Muckleneuk, Pretoria (1935) with Eaton's characteristic indigenous trees.— 52
- Figure 42:** Working drawings for **House Cordélie** for Mr. Stoker*, John Street, Erf 351, Muckleneuk, Pretoria (1935).— 52
- Figure 43:** **House Borckenhagen***, 47 Glenhove Road, Melrose Estate, Johannesburg – the first Eaton drawings showing the entire house as unplastered brick (1935).— 52
- Figure 44:** Extract from drawing of additions to existing Cape Dutch house for **Dr Marie Te Water**, Walker Street, Sunnyside, Pretoria (1936).— 54
- Figure 45:** Extract of the initial mono-pitched roof design for **Bungalow Partridge**, Wonderboom Poort (1935) with 'Streamline Moderne' elements.— 54
- Figure 46:** **Bungalow Partridge** (1936), Wonderboom Poort: The house seems to grow from the earth with a stone plinth. Horizontal lines, strip windows and overhanging, pitched roof, draw strong resemblance to Wright, also in the presentation of foliage seemingly growing from the house.— 54
- Figure 47:** **House N.J. Smit***, Bailey Road, Muckleneuk (1936). Note the wine glass and the caricature of a man with a fat tummy taking a nap above it (or it could be a corpse as a cross is shown above the caricature!)— 54
- Figure 48:** First, un-built design for **House Theron** cor. Mackenzie and Pienaar Streets, Brooklyn, Pretoria (1936).— 56
- Figure 49:** Working drawings of **House Kling**, additions and alterations to a house in Town Lands, Quagga-poort Road, Pretoria (1936).— 56
- Figure 50:** An extract from the interior drawing of the Land Bank in Potchefstroom, showing the word 'faggots' to describe the **vertically corrugated glazed tile surfaces** (1941).— 58
- Figure 51:** An image of the interior wall surfaces of the Land Bank (1940–1941), Potchefstroom (Image from Harrop-Allin, 1975:44).— 58
- Figure 52:** Extract of drawing for the double storey option for **House Theron*** (1937), cor. Pienaar and Mackenzie Streets, Brooklyn, Pretoria.— 58
- Figure 53:** Extract of drawing for alterations to existing **House Curlewis***, originally by Gordon Leith (1927), 357 Edward Street, Waterkloof, Pretoria.— 58
- Figure 54:** **House Rawlins***, Erf 384, Mackenzie Street, Brooklyn (1937), redrawn for the 1937 exhibition.— 60
- Figure 55:** **Homestead Cooper**, on the farm 'Outlook' near, Pyramids/Rosslyn, Pretoria (1937).— 60
- Figure 56:** The letter-type plan for **House and Studio Van Wouw** (1937–1938). The house is currently owned by the University of Pretoria and is in pristine condition.— 62
- Figure 57:** Sections and elevations of **House and Studio Van Wouw***, Corner of Rupert and Clark Streets, Brooklyn (1937–1938).— 62
- Figure 58:** Section of **House and Studio Van Wouw***, Corner of Rupert and Clark Streets, Brooklyn (1937–1938).— 62
- Figure 59:** Plans of **House Tosi** (1938) with external staircase.— 64
- Figure 60:** A Citrohan derivative: **House Tosi**, Westend (1938).— 64
- Figure 61:** **House Bram Fischer***, 12 Beaumont Street, Oaklands, Johannesburg (1938).— 66
- Figure 62:** **House Malherbe**, Waterkloof, Pretoria (1938).— 68
- Figure 63:** **House De Loor***, John Street, Muckleneuk Ridge (1937–1938).— 70
- Figure 64:** **House Lorne**, Wierda Bridge, Pretoria (1938).— 70
- Figure 65:** **House Hamilton***, Erven 267+8, Loveday Street, Muckleneuk, Pretoria (1939).— 72
- Figure 66 (top):** **House Lodder***, corner of Alexander and Mackenzie Streets, Brooklyn, Pretoria (1939).— 74
- Figure 67 (bottom):** Two of the four different proposals for **House Cochrane**, Johannesburg (1939).— 74
- Figure 68:** **House Anderssen***, Mountain Lane, Preto-

- ria North (1939) was the only timber house Eaton ever did.— 76
- Figure 69: Giotto's Hill***, House for Walter Battiss, 20th Street, Menlo Park, Pretoria (1939). The drawings were recently done by one of the UP architecture students.— 78
- Figure 70: House van der Merwe***, Derde Poort, Magaliesberg (1940) with alternating brick coursework metaphorically evoking African bead and basket work.— 78
- Figure 71: House Eybers**, Menlo Park, Pretoria (1940).— 80
- Figure 72: House Venter**, Lawley Street, Waterkloof (1940), replica of House Eybers.— 80
- Figure 73: House Neethling***, Corner of John and H.A. De Loor Streets, Muckleneuk, Pretoria (1940).— 80
- Figure 74: Cottage Teichman**, Milner Street, Waterkloof, Pretoria (1940).— 82
- Figure 75: House for Adv. Franz Boshoff**, St Patrick's Street, Muckleneuk, Pretoria (1940).— 82
- Figure 76: Homestead Warren***, at farm 'Timaloo' near Pietpotgietersrust (1941).— 85
- Figure 77: House Truter-Boshoff***, Erf 495, Anderson Avenue, Northcliff, Johannesburg (1943).— 86
- Figure 78: House Drakensberg**, cor. Boshoff and Veale Streets, Nieuw Muckleneuk, Pretoria (1943).— 87
- Figure 79: Farmstead Buys**, Uitgevallen, Vereeniging (1943).— 88
- Figure 80: Cottage Jacobsz***, 494 Hilda Street, Hatfield, Pretoria (1943).— 88
- Figure 81: House Tindall**, Atholl, Illovo, Johannesburg (1943).— 89
- Figure 82: Farm House Eaton**, on portion of Farm Garstfontein, Pretoria District (1944).— 90
- Figure 83: Photograph of Ygdrasil***, Studio for artist Alexis Preller (c. 1944).— 90
- Figure 84: House Connell O'C. Maggs***, Somerset Estates, Naboomspruit (1945), present-day Mookgophong, Limpopo Province.— 90
- Figure 85 (on the next spread): Also of House Connell O'C. Maggs*.**— 92–93
- Figure 86: African Compound**, Pretoria Country Club, Pretoria*. The design was not executed exactly as Eaton had envisaged it (1948–9).— 95
- Figure 87: Extensions to a Homestead for Mr Warren***, at farm 'Timaloo' near Pietpotgietersrust (1948), current-day Mokopane, Limpopo Province.— 96
- Figure 88: Additions to House Hamilton***, Loveday Street, Muckleneuk, Pretoria (1948).— 96
- Figure 89: House Greenwood***, The Willows, Pretoria with the initial (accidental?) 'inverted' concept proposal (August 1948).— 98
- Figure 90: House Greenwood***, The Willows, Pretoria, the revised concept proposal (May 1949).— 98
- Figure 91: House Greenwood***, sketch plans (Aug 1949).— 98
- Figure 92: The Greenwood Village*** (April 1950).— 100
- Figure 93: Construction drawings of House Greenwood*** (March 1951), showing the detail of the brick paving.— 100
- Figure 94: The completed scheme for the Greenwood House** with the later addition of the guest rondavel.— 100
- Figure 95: Unknown Cottage***, Berea Street, Muckleneuk, Pretoria (c. 1949).— 103
- Figure 96: House Anderssen***, The Willows, Pretoria (1949).— 104
- Figure 97 (bottom): Working drawings of House Anderssen***, The Willows, Pretoria (1950).— 104
- Figure 98 (on the next spread): Working drawings of House Anderssen***, The Willows, Pretoria (1950).— 106–107
- Figure 99: House Willem de Sanderes Hendrikz**, on the farm 'Swalkerskraal', Plettenbergbaai, Western Cape (1951).— 108
- Figure 100: House Axelson**, Meyerspark, Pretoria (1952).— 108
- Figure 101: House Du Preez***, Hurlingham, Johannesburg (1953).— 108
- Figure 102: Braaivleisplace (sic) for Ross Glen**, 18 Milner Street, Waterkloofrif, Pretoria (1953).— 110
- Figure 103: Cottage and flats Borckenhagen**, Barnard Street, Potchefstroom (1954).— 110
- Figure 104: House Holsboer***, cor. Crown Avenue & Albert Street, Waterkloof, Pretoria (1954).— 110
- Figure 105: Stone-screened garden enclosure with convertible braaivleis hearth-table for Mr V.O. Price**, 63 Albert Street, Waterkloof (1956).— 112
- Figure 106: House Heystek**, Milner Street, Waterkloof (1957).— 112
- Figure 107: House Boorsma**, Potchefstroom, North West Province (1958).— 112
- Figure 108: House for the Australian High Commissioner**, Canopus Street, Erf 189, Waterkloof Ridge, Pretoria (1959).— 114
- Figure 109: Alterations to House Peart**, cor. Long and Edward Streets, Waterkloof, Pretoria (1959).— 115
- Figure 110: Additions to the existing house of Mr. Glen** cor. Milner Street and Brooks Avenue, Waterkloof (1960).— 116
- Figure 111: No drawing in the UP Repository: Cul de Sac***, Pretoria (c.1960), photograph in the UP Repository as published in Harrop-Allin (1975:116).— 116
- Figure 112: House and Studio for Esias Bosch***, Wit-rivier, Mpumalanga (1961).— 117

Figure 113: House Moolman/the Courtyard House, Antares Street, Waterkloofrif, Pretoria (1961). The drawing above shows the plan to section/elevation relationship.— 118

Figure 114: House Moolman/the Courtyard House, Antares Street, Waterkloofrif, Pretoria (1961). The detail drawing is of the delightful paving of **geometrical brick patterns**.— 118

Figure 115: House for artist Laurence Scully*, Waterkloof Ridge, Pretoria (1962).— 120

Figure 116: House for artist Laurence Scully*, Waterkloof Ridge, Pretoria (1962).— 121

Figure 117: Survey drawing by Eaton of the 'House for Dr Koto Matsudaira', Kamakura, Japan (1962).— 122

Figure 118: House van den Berg*, Clearwater Road, Lynnwood Glen, Pretoria (1964).— 122

Figure 119: House Bonsma, Pretoria (no date).— 124

Figure 120: House for the Manager for Barclay's Bank, Sabie (no date).— 124

Figure 121: House Spence, Church Street, Arcadia, Pretoria (no date).— 124

Figure 122: House Rissik, Arcadia Street, Pretoria and alterations for the same client to house in Fife Street, Houghton (no date).— 126

Figure 123: House Kupferberger, Brooklyn, Pretoria (no date).— 126

Figure 124: A typical letter-type plan, the Laurels Cottage for Mr Price (1930).— 158

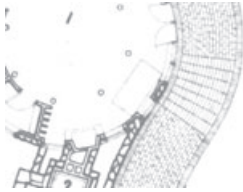
Figure 125: House Rademeyer (1935) is an example of a typical centralized prism typology, the least used by Eaton.— 158

Figure 126: House Boyes (1934) is an example of a typical centrifugal prism.— 159

Figure 127: The Anderssen House (1939) is an example of a typical plan configuration of additive rectangle.— 160

Figure 128: The design of the African Compound at the Golf Club (1948) is a typical village typology.— 160

Figure 129: Drawings do not always communicate the warmth and emotive quality of spaces (Anderssen House, 1950. Eaton Collection UP Repository.)— 175



CHAPTER 1

THE PROBLEM AND ITS SETTING

1.1. Intent

The documentation of the legacy of South African architect Norman Musgrave Eaton¹ (1902–1966), as preserved at the University of Pretoria, provides the material for a contemporary analysis and extrapolation of his domestic *oeuvre* through the construction of a biographical-disciplinary context and chronology.

1.2. Background

1.2.1. Personal interest

This study originated when from 2006 to 2007, the researcher, as a young architect and lecturer at the School of Architecture and Planning, University of the Witwatersrand, taught a combination of two courses – one on pre-colonial African architectural history – and the other in the third year design studio. Together with questions raised by a cosmopolitan student group, the combination of subjects prompted an initial interest in the topical discourse of ‘identity’ and an appropriate design approach for contemporary African architecture.

Leading up to this personal interest, the inaugural address of Prof. ‘Ora Joubert² presented at the University of Pretoria in November 2004 had sparked an unprecedented debate on architecture in the mass media for months to follow. Joubert, amongst others, had deplored inappropriate and stylistically driven commercial and residential contemporary architecture in South Africa. Interestingly, the debate in the media focused primarily on what constitutes appropriate residential local architecture.

The work of Norman Eaton provides opportu-

nity for exploration against this backdrop, as he had sought for an appropriate southern African architecture long before it became *au courant*. His architectural *oeuvre* expresses a rare encounter between the Modern Movement and Africa. Based in Pretoria, his residential architecture draws strongly on the African monumental past, while denoting both a regional and universal consciousness. Local influences are drawn from diverse sources – Cape Dutch architecture, Great Zimbabwe, Eastern Africa – and the unself-conscious architectural endeavours of the Ndebele.

1.2.2. Eaton records

Prompted by the personal interest in his domestic work, the researcher sought out Eaton’s collection of records as a primary source towards an understanding of his works. These records are held at the Department of Architecture, University of Pretoria (hereafter UP), where they had been in safekeeping since 1989.³

The bulk of his records, consisting of hundreds of drawings, personal papers, letters, autobiographical *personalia*, Africa diaries, photo albums and other records of projects, were originally deposited and indexed in a small document store in the Boukunde Building, UP, and later moved to a larger records store in the same build-

1 For a short biography on Norman Eaton, see Appendix B. For a timeline of his life and work, refer to Appendix A.

2 See a biographical introduction to Joubert, Appendix B.

3 See Appendix A for a detailed timeline of the Eaton Records and related information.

2 THE NORMAN EATON LEGACY

ing. Around 2007, at the time the researcher became involved with these records, most of the drawings of projects had been indexed according to the so-called TOPi system (*Trefwoordstelsel vir die Ontsluiting van Plan-inligting* [Keyword System for the Retrieval of Plan Information]). While they could be traced easily according to respective TOPi reference numbers, Eaton's documents were dispersed amongst the records of several other architects.

UPSpace, the institutional research repository of the UP (an open access electronic archive) had been implemented in 2006.⁴ (<http://www.artefacts.co.za/main/Buildings/articles.php?artid=388> [Accessed: 15/01/2013]). As a result, a few of Eaton's diaries and drawings had by then been scanned to make them electronically available on UPSpace and the physical documents already scanned were subsequently moved to the Pretoriana Room, Special Collections Unit in the Merensky Library.

It was therefore difficult to get a comprehensive overview of Eaton's residential work and to get an insight into the records as a complete collection. To add to the difficulty of accessing the body of his work, all the original drawings of projects are either sizes A0 (1189 x 841mm), A1 (841 x 594mm), A2 (594 x 420mm) and with exceptions, A3 (420 x 297mm). This makes it difficult to handle them physically and appraise them within some kind of reference system. Diaries and personal papers had been given index codes, but were also not arranged in a convenient order.

1.2.3. Consequence

To facilitate the accessibility of the records, and isolate material pertaining to his domestic *oeuvre*, the researcher started to extract records from their indexed positions amongst the work of other architects. A systematization of the records followed: documents were arranged chronologically

to relate them to episodes in Eaton's biography and the discipline of architecture as a whole.

The researcher accordingly set out to create a narrative biography based on source material, comprising other people's writings, but primarily the material of Eaton's collection of records in order to extract those related to his domestic *oeuvre*. Those projects or documents pertaining to works of types other than the domestic, which assisted in a critical understanding of his output, were also extracted.

The systematization of the records enabled the researcher to set up a biography within context in order to capture the critical moments in Eaton's development and thinking.

The chronological study of his domestic drawings allowed for the tracing of African and other influences in relation to his travels and their translation into architectural expression.

Plan composition and motifs emerged with clarity to aid in providing a broad appraisal of his domestic work. The discovery in Eaton's 1943 to 1944 east African diary of a drawing of 'Complexes of Native Dwellings' proved to be of singular importance. Eaton had drawn a series of plan typologies 'as seen from the air' of dwellings in Tanganyika (modern day Tanzania) (Eaton diary entry: 1944-01-18, Eaton Collection, UP Repository). Formal characteristics presented by this drawing held in common established typological groupings recognizable in his domestic *oeuvre*.

A similar chronological setting out of the various typological formations discovered in his domestic work enabled the researcher to establish in which ways Eaton's design approach evolved over time and in which ways it stayed the same.

⁴ See Appendix A for a detailed timeline of the Eaton Records and related information.

1.3. Main premise

The following series of hypotheses underpins the study:

- **Premise 1:** There are sufficient records represented in the 'Eaton Collection' from which to analyze and discover the making of his 'designer's mind'.⁵
- **Premise 2:** In order to access the records, it is important to contextualize the places and processes of his 'designer's mind'.
- **Premise 3:** The interpretations and extrapolations of meaning from the drawn records give access to a reading of the critical moments in Eaton's domestic *oeuvre*.
- **Premise 4:** Eaton's domestic *oeuvre* has not been analyzed as an entire body of work.

5 'Designer's mind' refers to an individual designer's philosophy on design and/or singular way of designing because of his/her inherent, intangible abilities shaped by a particular frame of reference.

1.4. Statement of the research problem

Eaton's domestic *oeuvre* draws strongly on a series of contextual influences, most notably rooted in a regional and an African consciousness. The space in-between the Modern, regional and African consciousness is explored *vis-à-vis* the architectural legacy of Eaton as preserved in the records of the 'Eaton Collection'.

The main research question is: **Why and how does the domestic architecture of Eaton express its lineage of forms, space, material and detail?**

Related questions are:

- Why and how did place (physical and cultural) and process (evolution and lineage) influence Eaton's 'designer's mind'?
- What are the critical moments in Eaton's development and thinking?
- What do we learn from Eaton as a designer

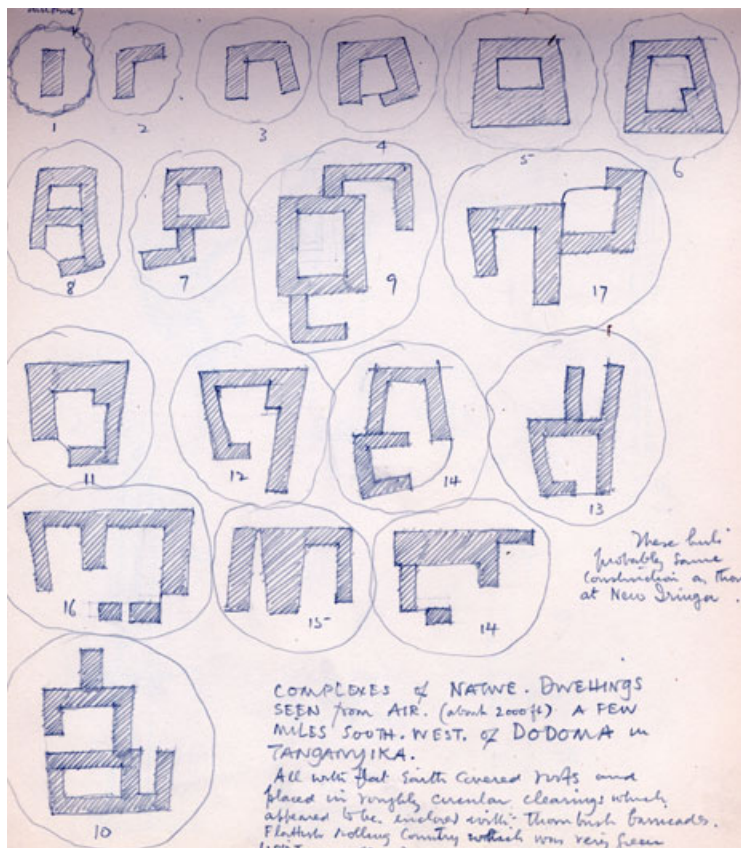


Figure 1: An extract from Eaton's 1944 Africa diary (Diary entry 1944-01-18, Eaton Collection, UP Repository), showing 'Complexes of Native Dwellings seen from the Air' a few miles south west of Dodoma in Tanganyika (present day Tanzania). Formal characteristics presented by this drawing held in common established typological groupings recognizable in his domestic *oeuvre*.

4 THE NORMAN EATON LEGACY

towards the creation of an appropriate South African domestic architecture?

- What possible contemporary readings and related research questions are made accessible through the study?
- What are the broader implications for architectural design and theory in view of this study?

1.5. Delineation and clarifications

1.5.1. Delimitations

Eaton's domestic work is the primary interest of the researcher. This study is limited to a chronological, contextual, and comparative analysis of Eaton's domestic work as preserved in the repository of his drawings.

Those projects and works other than domestic that assist in a critical understanding of his output, and are therefore of special significance to the study, are referenced.

The primary source of the study is the drawings of domestic projects in the Eaton Collection, UP Repository, which represent an overview of an entire body of work. Most of his built houses are not in existence any more, or are not accessible. Very few of his built houses have not been altered (sometimes beyond recognition).⁶

While many of the projects were evidently constructed (because there are construction drawings in the repository), they have not been visited to confirm their current existence (such as House Connell O'C Maggs, Naboomspruit, 1945).

The primary interest of the researcher was the content of Eaton's documentation and not so much the possible influence(s) of execution methods or drawing methods of his work. However, a description of his documentary execution and the changes it underwent over time are described in the main body of the text, including the influence of certain methodologies in his later career.

1.5.2. Definitions

1.5.2.1. Domestic *oeuvre*

Domestic *oeuvre* refers to Eaton's residential work, represented in his collection as freestanding dwellings of individual private clients with personal briefs.

1.5.2.2. Modern Movement

The various international manifestations of the Modern Movement are explained in Appendix C of this document. It is important to note that in South Africa, the Modern Movement played out differently than in Europe, elaborated in more detail in Chapter 2 of this document.

1.5.2.3. Records

According to McKemmish (McKemmish in Ellis, 1993:3–4):

Records are the information by-products of social and organisational activity. They are defined by their contextuality and their transactionality, i.e. by their creation in the context of social and organizational activity, of human interaction. Records creation refers to the act of accumulating records or incorporating them into a recordkeeping system.

Key attributes of records of social and organizational activity are their links to their creator, the activity itself, and other records accumulated as part of the activity.

Records in the context of this document refer to the diaries, letters, photographs, and primarily drawings that make up the so-called 'Eaton Collection' or 'Eaton Repository'. They include the records already deposited in their physical form,

⁶ To the knowledge of the researcher, only Houses Van Wouw (1937–8) and Anderssen (1939) remain preserved exactly as they had been designed and built, with no alterations.

but not appraised by a qualified archivist as having ‘continuing value’⁷ (McKemish in Ellis, 1993:5) and therefore constituting an ‘archive’.

1.5.2.4. Archive

Archives are part of a wider world of information than records. Records do not always have ‘continuing value’, but when records are considered to be of continuing value, based on a set of criteria, they are collectively called ‘archives’ (McKemish in Ellis, 1993:5).

Records have to go through a process of appraisal before being deemed of continuing value – a process for which a professionally qualified archivist is responsible.

The definition of the words ‘archives’ and ‘archive’ in this context specifically reads:

Archives are documents made or received and accumulated by a person or organization in the course of the conduct of affairs and preserved because of continuing value. Historically, the term has often referred more narrowly to non-current records deposited or selected for deposit in an archival institution. The word ‘archives’ is also commonly used to refer to

- The organisation, agency or program responsible for the selection, care and use of the records of continuing value
- The repository, building or place dedicated to their storage, preservation and use.

In its singular form, ‘archive’ refers specifically to the whole body or group of records of continuing value of an organization or individual, a vital source also known by the French word *fonds* or the term *archieff* common to many European languages (McKemish in Ellis, 1993:2).

1.5.2.5. Repository versus UP Repository

The word ‘repository’ normally refers to a physical collection of records or a place where documents are housed. In this case, the Eaton Repository or Eaton Collection is held partially in the Boukunde Building, Department of Architecture, UP and partially at the Pretoriana Room, Special Collections Unit, Merensky Library.⁸

In this document, if the term ‘repository’ is qualified – specifically as ‘UP Repository’ – it will however, refer to the Institutional Repository of the UP, called ‘UPSpace’, which is defined as ‘an open access electronic archive collecting, preserving and distributing digital materials created by members of the University of Pretoria’ (<http://repository.up.ac.za/> [Accessed 12-20-2013]).

The definition of ‘Institutional Repository’, as applied by the UP within this context, therefore, reads as follows:

A university-based institutional repository is a set of services that a university offers to the members of its community for the management and dissemination of digital materials created by the institution and its community members.

It is most essentially an organizational commitment to the stewardship of these digital materials, including long-term preservation where appropriate, as well as organization and access or distribution (Lynch, 2003:1).

1.5.3. Archivists and archival processes

It was not the intention of the researcher to ‘archive’ the Eaton Collection. Rather, as an architect and designer, it was the intention of the researcher to better understand and analyze Eaton’s domestic work from a designer’s per-

⁷ See entry ‘1989’ in the ‘Timeline and Chronological list of designs by Eaton’, Appendix A.

⁸ See entry ‘2006’ in the ‘Timeline and Chronological list of designs by Eaton’, Appendix A.

spective. However, in the quest towards this endeavour, it was necessary to systematize Eaton's records through the construction of a biographical-disciplinary context and chronology. In doing so, there was an overlap, in the broadest sense, with some of the functions a qualified archivist would normally have performed.

Archivists are responsible for the identification and care of small percentages of records that are deemed of continuing value. Determining which records can be disposed of and which records will become archives is the archival skill of 'appraisal' (Reed in Ellis, 1993:157). In the past, appraisal was a neutral, scientific process. These days, it is acknowledged that any person is influenced by their environment and predisposition (social, economical, political, and cultural).

Appraisal decisions are based on evidential value and informational value, where the first is based upon the function the documents had originally served and the second refers to the value to researchers from a variety of fields of knowledge. Various appraisal techniques have evolved over the past 50 years to enable the archivist to formulate criteria to determine what records should be selected as archives (Reed in Ellis, 1993:157–161).

According to Harris, the core archival 'principle of provenance' means that records have meaning within the 'contextual circumstances of their creation' and within the 'realm of contemporary use' (Harris, 1997:21). Records are the products of processes involving complex interactions between their creators, socio-historical trends or patterns and clients. The purpose of appraisal is to secure an appropriate documentary reflection of this milieu. Records that provide the best evidence of this milieu have archival value. Archival value is therefore largely located in the processes that underlie their creation (*ibid.*). The archivist must therefore:

- a. Identify the key elements of the contextual milieu (appraisal of processes).
- b. Then seek to document them (appraisal of records) on various levels starting with the broadest context.
- c. After having illuminated the entire context of the records to be appraised, the archivist turns to the documents themselves: records are subjected to 'tests of age, uniqueness, authenticity, completeness, extent, fragility, manipulability etc' (Harris, 1997:21–22).

Only after the process of appraisal has been conducted, can records constitute an 'archive', whereafter they must be properly protected and cared for, which underpins the primary responsibility of preservation.

The archivist, therefore, provides access to an archive after a process of appraisal of processes and records. The researcher of this document had done an appraisal of Eaton's work in the broadest sense through a similar process of contextualization. The researcher, however, went beyond this core function of the archivist towards a critical reading or analysis of the work.

1.6. Editorial conventions

All introductions to persons are made in **Appendix B** of the document, therefore, individuals are not introduced in the main body of the text.

All relevant architectural style terms are defined in **Appendix C** of this document.

Discrepancies in the spelling of surnames were encountered in Eaton's records, particularly in connection with his clients.

Inconsistencies in the display of dates are because Eaton's dates are quoted directly as they appear in his diaries, letters or on drawings.

Le Corbusier (or Charles-Édouard Jeanneret-Gris) will consistently be referred to by his pseudonym.

1.7. Research methodology & techniques

One hundred and five residential buildings, including alterations and additions to existing structures, are documented in the Eaton Repository. This amounts to 397 drawings, varying in size from A4 to A0.

Approximately 50 public or institutional projects are preserved in the collection, amounting to roughly 440 drawings, also varying in size. Eaton himself, easily recognizable through his handwriting and style of drawing, executed the majority of the drawings.

In performing the tasks as outlined in the following bullets, the researcher became aware of the importance of the plan as a ubiquitous point of reference in Eaton's design drawings and as one of the only common denominators in the series of his documentation. In addition, the researcher recognized certain motifs that were either universal or unique in Eaton's work and in particular, picked up where Africa possibly entered his designer's mind. These three aspects, namely the plan as common denominator in the documentation of his work, universal or unique themes and motifs specific to Africa, became the initial and simultaneous analytical tools used to unpack and better understand Eaton's repertoire. These aspects therefore became the predominant themes that informed the examination of his work.

- Eight-hundred and five documents were extracted from the TOPi-indexed system, scrutinized by the author, and arranged chronologically. These are the drawings of projects, both built and un-built as preserved in the repository.
- Domestic drawings were separated from other types of work, and were then scanned to a high resolution electronic format, to enable access on UPSpace.
- Simultaneously, the researcher started to

construct a timeline of the drawings in relation to Eaton's personal biography, the architectural setting and events of significance.

- It became increasingly clear that the plan was where Eaton had concentrated his initial energy in the design process – as opposed to for example design exploration through abstract diagrams, or three-dimensional drawings, sections, details or other formal devices. As such, more than one permutation of a plan would often be the only documentation in the Repository to serve as evidence of the existence of a project. Where elevations and sections are included on a drawing, the plan is at the heart of the drawing, with the rest as continual relationship. In fact, Eaton himself had later in his career verbalized that his designs started with planning and co-ordination of spaces (Harrop-Allin, 1975:90), from which everything else flowed.
- All residential building plans from 1930 to 1964 were therefore electronically extracted from the scanned documents on the same scale and all were oriented north, to enable comparative analysis.
- On the cue provided by Eaton (see Figure 1), a typological lineage was set up to enable the researcher to recognize critical moments in Eaton's development as a designer. The lineage maps 64 of the 97 residential projects in the Eaton Repository in chronological order, on the same scale and all oriented north. The 64 projects were selected because they are of stand-alone designs (as opposed to alterations and additions) and because they best represent his residential work.
- In addition, there are letters, diaries, photo journals and sketchbooks of relevance amongst his records. These were scanned and where appropriate, were related to the drawings of projects and the timeline of events.

8 THE NORMAN EATON LEGACY

- Descriptive, explorative, and analytical research was conducted in order to reveal the contextual motifs, and the conceptual and formal order underlying his work.
- Translation of recognized motifs into his design vocabulary was documented accordingly and distilled visually.
- While the focus of the investigation lies in Eaton's domestic work, non-residential projects of special significance to the analysis and understanding of his work are also included.
- The primary source for the study was the drawings of domestic projects in the Eaton Collection. Secondary sources included the remainder of the records in the Eaton Repository, while the writings of others informed the critical analysis of his work.
- The author had also visited several of Eaton's houses and public buildings, which enabled comparison between the built work and the drawings available in the UP Repository.
- Doreen Greig's *Herbert Baker in South Africa* (1970, Cape Town: Purnell).
- Gilbert Herbert's *Martienssen & the international style: the modern movement in South African Architecture* (1975, Cape Town: A. A. Balkema).
- Hofmeyer's *Carl Otto Hager van Stellenbosch* (1993, Stellenbosch: Stellenbosch Museum).
- Arthur Barker's recently completed doctorate on Gabriel Fagan *Heterotrophic syntheses: mediation in the domestic architecture of Gabriel (Gawie) Fagan*, 2012, Unpublished PhD thesis, University of Pretoria.

1.8. Relevance

The relevance of this study is particularly noteworthy in the context of the search for a so-called South African architectural identity, especially pertaining to residential architecture. Besides having to deal with the idea of 'memory' in the post-Apartheid landscape (as expressed in the recent proliferation of museum/monument architecture) the exploration of appropriate semantics has taken centre stage in current architectural discourse.

This debate transcends semantics – to the level of a metaphysical, abstract, formal and particularly spatial range of contextual relevance.

In addition, examples of critical evaluations of the body of work of South African architects worthy of international relevance are few and far between. Biographical publications such as

are the few non-biographical in-depth sources that attempt to investigate the life and work of seminal South African architects. In addition there was the study in 1972 and subsequent book published in 1975 by Clinton Harrop-Allin on Norman Eaton (*Norman Eaton: Architect. A Study of the work of the South African architect Norman Eaton 1902–1966* (1975: Cape Town and Johannesburg: C. Struik publishers). There has since been no up-to-date re-evaluation of his body of work, despite renewed interest in the links between Europe and Africa.

1.9. Outline of the study

Abstract

Acknowledgements

Table of contents

List of Figures

Chapter 1 – Introduction provides an introductory background to the investigation; highlights the intent, main premises, research problem, presuppositions, relevance, and research methodology. The organization of the study is set out, along with delineations and clarifications.

Chapter 2 – Contextualization: Cultural inheritance of place outlines the context and diverse sources that formed the backdrop to Eaton’s architectural *oeuvre* and shaped his ‘designer’s mind’.

The **first section** deals with the place-specific architectural milieu within which he operated.

The **second section** sketches the physical and cultural place-specific dynamics of Pretoria, where he had set up practice in the early thirties.

The **last section** introduces his affinity to the African continent and his singular assimilation of an African consciousness.

Chapter 3 – Translation into an evolution of form, space and ‘motif’ forms the main body of the investigation. It critically appraises his residential built as well as his unrealized projects in chronological order, capturing critical moments in his development against the backdrop of his biography. The chapter provides an overview of Eaton’s residential work, with an outline of formal, spatial, surface and detail lineages, translated into built form as an *esprit de système*.⁹

Chapter 4 – Key Findings outlines the discoveries made through the investigation. It will highlight the typological formations of Eaton’s residential work in order to recognize critical moments.

Visual distillation of narrative will summarize the various motifs picked up in the review of his work. The series of motif sheets draws visual analogies between the work of Eaton, his peers, and other contextual references in order to render the *esprit de système*. The motif sheets include

a chronological setting out of Eaton’s travel observations in relation to chronological incidents of abstracted African texture, pattern, form, object and detailing in his work.

Chapter 5 – Relevance, recapitulation and recommendations underlines the meaning of the study, its contribution and it includes a recapitulation, summary of findings, and highlights opportunities for future studies.

Literature Overview

APPENDICES

APPENDIX A: TIMELINE and CHRONOLOGICAL LIST OF THE DESIGNS OF EATON

APPENDIX B: DRAMATIS PERSONAE

An introduction to the individuals mentioned in the main body of the text, all of whom had played a part in the creation of an *esprit de système* from the turn of the previous century to the late 1960’s and beyond.

Prominent individuals for whom Eaton had designed houses are also included in the brief biographies.

APPENDIX C: GLOSSARY OF ARCHITECTURAL TERMS

With exceptions, the following series of architectural term definitions focuses on the impact of various movements on residential architecture and does not necessarily deal with urban, social, institutional or related issues pertaining to respective dogmas – unless relevant to the main body of text.

⁹ *Esprit de système* [spirit of systems] quantifies the general attitudes in society towards intellectual, cultural, moral and political values prevalent at a certain time/ epoch.

10 THE NORMAN EATON LEGACY

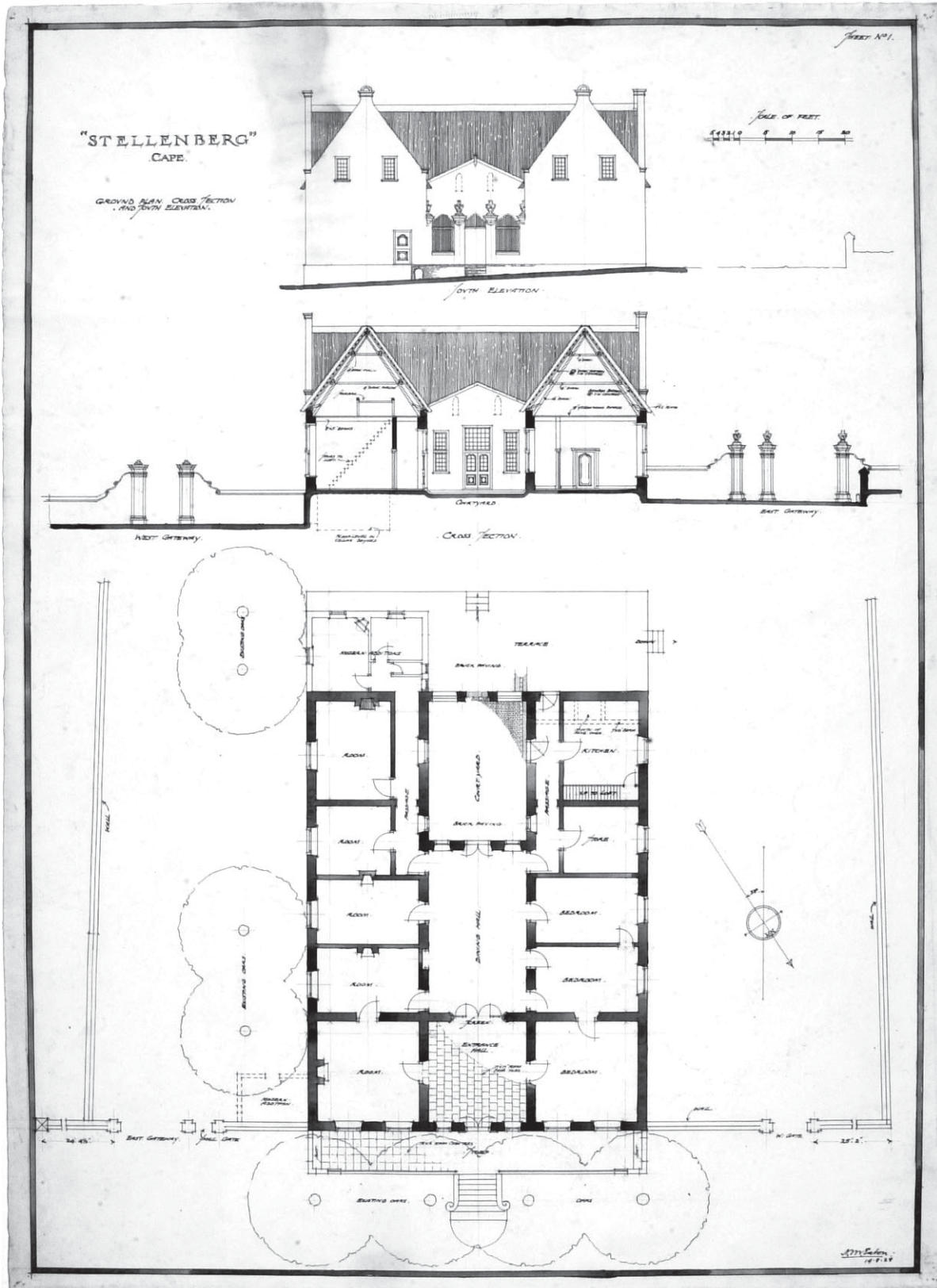


Figure 2: Redrawn project: House Stellenberg, Wynberg, Western Cape (1928).

CHAPTER 2

CONTEXTUALIZATION

CULTURAL INHERITANCE OF PLACE



Norman Eaton was a keen observer of the natural and cultural landscapes of his time and an extraordinarily disciplined artist who had the ability to translate his observations into architectural resolution. His unique synthesis of architectural design was built upon sources to which he was directly or indirectly exposed or that he had actively sought out.

The following chapter outlines the context and diverse sources that formed the backdrop to Eaton's architectural *oeuvre* and shaped his 'designer's mind'.

- The first section deals with the architectural milieu within which he operated.
- The second section sketches the place-specific dynamics of Pretoria, where he had set up practice in the early thirties.
- The last section introduces his affinity to the African continent and his personal assimilation of an African consciousness.

This chapter should be read together with the timeline, Appendix A; the *Dramatis Personae*, Appendix B; and the Glossary of Architectural Terms, Appendix C.

2.1. Architectural setting

2.1.1. Earliest influences

Eaton had completed his education at the University of the Witwatersrand (Wits) from 1922 to 1928, before the revolutionary forces of the Modern Movement¹ took hold of the Institution. He was influenced by the Arts and Crafts direction of his mentor, Gordon Leith² on the one hand,

and had a strong affinity with Cape Dutch architecture on the other hand. As a child on his mother's farm in the Cape, Eaton had first-hand experience of the latter, which left 'deep impressions' (Eaton, 1966:53) on him. He revered the simplicity and appropriateness of Cape Dutch architecture, rather than its style or aesthetic (Barker, 2012:89). As a student, he had been one of a group who assisted Professor Pearse³ with his book on Cape Dutch architecture, *Eighteenth Century Architecture in South Africa* (1933).

Leith's affinity with the architecture of Ancient Rome and the Italian Renaissance had a profound influence on the young Eaton. Besides ever-present, though nuanced, classical references in Eaton's later work, a small and perhaps insignificant piece of forensic evidence of this early influence prevails in his use of the word *loggia* (along with *verandah* or *stoep*) throughout his career – a term derived from the Italian Renaissance.

Leith's traditional-historical emphasis was infused with a strong individuality and an ability to

¹ See Appendix C.

² For a short biography of Gordon Leith, refer to Appendix B.

³ For a short biography of Professor Pearse, refer to Appendix B.

respond sensitively to the particularities of site. Along with an ability to exploit the latent potentialities of materials, his work directly relates to his previous employer, Sir Herbert Baker,⁴ therefore establishing a lineage between Baker-Leith-Eaton (Harrop-Allin, 1975:14).

Eaton's clients and acquaintances, through Leith, would include Henk Pierneef and artist Anton van Wouw,⁵ pursuers of an Afrikaner Nationalist identity, which permeated the architectural discipline through a search for an 'appropriate language' for monuments and buildings to represent the identity of the young nation (Fisher, 1998:124). In similar vein, architect Gerard Moerdyk,⁶ a close friend of Leith, had since the 1920s propagated a place-specific architecture rooted in African soil. Together with Pierneef, he advocated a domestic architectural language appropriate to the Transvaal through the use of local materials, such as thatch, local craftsmanship, response to climate and resultant honesty of language. The propagation of such architectural response was especially disseminated from 1919 to 1931 through *Die Boerevrou*, one of the first Afrikaans periodicals (Fisher & Le Roux, 1989).

In addition, the influence of the contributions of Pierneef and Moerdyk on Leith fostered his investigations into local building materials and practices, which were in turn passed on to Eaton (Barker, 2012:89; Chipkin, 1993:132).

Eaton's early work, from before World War II (WWII) oscillated between Cape Dutch influences, the Arts and Crafts, and a search for an appropriate place-specific architecture, while he concurrently started to work within the ambit of the Modern Movement.

2.1.2. Eaton and the first wave of the

Modern Movement in South Africa

The *South African Architectural Record (SAAR)*, journal of the Association of Transvaal Architects, from its first publication in 1925, was a primary

source for the dissemination of international architectural references. In December 1925, the article by Furner, 'The Modern Movement in Architecture' (SAAR, Dec 1925:87–89) broke new ground locally. The author referred to the protomodern architects Frank Lloyd Wright,⁷ Eliel Saarinen (1872–1950), Toni Garnier (1869–1948) and Erich Mendelsohn⁸ (Gerneke in Fisher *et al*, 1998:208). In addition to the availability of local source material on international influences, Eaton had been a regular traveller and was exposed to international practice from the outset of his career.

After having won the Rome Scholarship in 1929 (see Appendix B), Eaton travelled extensively from 1930 to 1932, assimilating the early 1930s architectural milieu of Europe. Le Corbusier's original book, *Vers une architecture* published in 1923, had just been translated into English by Frederick Etchells as *Towards a new architecture* (London: The Architectural Press). In 1929, Mies van der Rohe's Barcelona Pavilion for the International Exhibition, Barcelona, Spain had just been completed, and Le Corbusier and Pierre Jeanneret's Villa Savoye, Poissy-sur-Seine, France was completed by 1931. Towards the end of 1932, Eaton returned to South Africa to set up his own practice. In that year, the exhibition entitled 'Modern Architecture: International

4 For a short biography of Sir Herbert Baker, refer to Appendix B.

5 For short biographies of Henk Pierneef and Anton van Wouw, refer to Appendix B.

6 For a short biography of Gerard Moerdyk, refer to Appendix B. Moerdyk was a major exponent of Afrikaner Nationalism. Although he acknowledged Baker's influence, he defined the Union Buildings as an inauthentic architectural style. He also rejected Cape Dutch architecture in his search for a non-colonialist architecture (Barker, 2012:89).

7 For a short introduction to Wright, refer to Appendix B.

8 For a short introduction to Mendelsohn, refer to Appendix B.

Exhibition' was hosted at MoMA, New York under the directorship of Alfred Barr (1902–1981).

The differences between the Modern Movement as it played out in South Africa and in Europe have been mentioned previously.⁹ From the early thirties, Rex Martienssen¹⁰ pioneered the influence of a 'transitory modernity' (Barker, 2012: 77) on domestic architecture, mostly inspired by a Le Corbusian Functionalism. Martienssen had been appointed co-editor of the SAAR and in January 1932, his first Bauhaus-inspired issue appeared. His direct contact with Le Corbusier paved the way for the distillation of the tenets of the Modern Movement, mainly in the Transvaal (Gerneke in Fisher *et al*, 1998:208–9).

Eaton must have been aware of these early rumblings, yet the photo journals of his 1930 to 1932 encounters in Europe were filled with imagery of prominent historical architectural sites. During his stay in Rome, he interested himself in archaeological excavations and studiously measured out the Roman Baths at Ostia. His sketchbooks of the time are accurate renditions of ruins, selective detailing, texture patterns and annotated, dimensioned plans.¹¹

By contrast, Martienssen travelled to Europe on various occasions actively to seek out modern manifestations. During 1930, along with fellow-student Norman Hanson,¹² he visited all the major sites of the Modern Movement in France, Italy, Austria and Germany – including the 1927 Weissenhofsiedlung development and Mendelsohn's Schocken Store in Stuttgart. Martienssen sent postcards to the Wits architecture students, 'raving' about their finds (Cooke, 1988:17).

It was only in Eaton's 1934 trip to the Netherlands that there is evidence of visits to a limited selection of the contemporary work of the time. He visited amongst others, the expressionist housing projects of Michel de Klerk¹³ and the monumental housing project, Karl Marx Hof in Vienna, Austria (1927–1930) by Karl Ehn¹⁴ – of

both of which he kept postcards¹⁵ (Eaton Collection, UP).

Meanwhile, together with McIntosh¹⁶ and Hanson, Martienssen had forged an allegiance that led to the publication in 1933 of their manifesto, *zero hour* (sic), which was sent to Le Corbusier. The *maestro* dedicated his *Oeuvre Complète* (1919–1929) of 1937 (Le Corbusier and Jeanne-reet, 1943) to the Transvaal Group.¹⁷ He included a letter addressed to Martienssen and his fellow pioneers in the introduction to the publication (Frampton, 1980; 1992:254; Gerneke in Fisher *et al*, 1998:209).

The *Bauhaus* influence and the idea of a total environment of modern design captivated the young scions of the Modern Movement, and in due course a small number of houses inspired by Gropius, but mostly Le Corbusier, were built in the Transvaal.

9 A definition of the Modern Movement as it played out globally is unpacked in Appendix C – 'Modern Movement Internationally'. The difference of the Modern Movement as it manifested in South Africa is also summarized in Appendix C – 'Modern Movement in South Africa'.

10 For a short biography of Rex Martienssen, refer to Appendix B. To read a summary of the first Modern Movement in South Africa, refer to Appendix C.

11 Refer to the UP Space Repository at <http://repository.up.ac.za/handle/2263/667> for the sketches from his 1930 to 1931 sketchbooks.

12 For a short biography of Norman Hanson, refer to Appendix B.

13 For a short introduction to De Klerk, refer to Appendix B.

14 For a short introduction to Ehn, refer to Appendix B.

15 A postcard in the UP Repository, dated '13.8.34' from the Dutch architect H. Wach reads that 'you will be received with pleasure'. The postcard is part of a photo album that includes the following series of buildings: Karl Marx Hof, Wien Heiligenstadterhof, Wien Bartenstadt, Wien Lindenhof Kreuzgasse. There are also postcards of 'Modern Amsterdam', Architect M. De Klerk 1923–24, Amstellaan and Antwerp.

16 For a short introduction to McIntosh, refer to Appendix B.

With hindsight it seems that the Transvaal Group, now so fully committed to the Modern Movement, having absorbed the polemic and appreciated the practical implications of functionalism and new spatial concepts, had a need for an aesthetic direction with a grammar and vocabulary of design and an emotional content, which the somewhat 'surgical' and dry work of Gropius did not satisfy and for which the still very limited output of Mies was insufficient. At this strategic moment this need was wonderfully filled by the work of Le Corbusier (Cooke, 1988: 18).

The Corbusian influence went beyond his five points (Frampton, 1980; 1992:157), namely *pilotis*, roof garden, free facade, open plan, ribbon window, to the handling of form and space. Form was a geometrical statement, where forms related to another in an articulated manner, each distinct in a free relationship, yet combining to form a whole greater than the sum of its parts. There was also the device of linkages, so that forms did not merge into another to weaken their inherent geometries. Walls are always smooth to allow spatial continuity, similarly openings for doors and windows are placed right at the corners of rooms. There are no projecting nibs at corners and walls surfaces are extended through from one space to the next and from inside to out. Contrast is achieved through solid and void, and articulation of colour, emphasized by articulation of form. These aspects formed a primer for design as a new direction advocated most vociferously by Martienssen (Cooke, 1988:18–19).

While House Munro in Brooklyn, Pretoria by McIntosh (1932) was the first modern house to be published in the *SAAR*, June 1932, in that year, Eaton was working within an Arts and Crafts and Cape Dutch-inspired idiom, as seen in Farmstead Hill, near Lunsklip in the Transvaal. A series of Pretoria 'cottages' – a word associ-

ated with the Arts and Crafts – followed in the next year with Cottages Collender, Moggeridge, Smook and the first design proposal for Miss Boyes's cottage.¹⁸ He would only start working in the new idiom from 1934 onwards. Bernard Cooke¹⁹ recalled that on enquiring about designs of Eaton, one of the members of the Transvaal Group had said in a dismissive way that he 'was doing strange things with gum poles in Pretoria' (Fisher, 1997:76)!

House Stern (1934–5), Johannesburg, by Martienssen, Fassler & Cooke, explicitly showed the theoretical framework of Martienssen and the building's resolution of complex sculptural form marks it as a major local interpretation of the International Style. Among Norman Hanson's early works was Hotpoint House (1934) in Johannesburg. Herbert (1975:137) maintained that the building 'was the first major South African building authentically in the modern idiom to appear in the pages of any South African publication'.

Martienssen's own house in Greenside, Johannesburg (1939–1940) was a seminal work, which has become the symbol of the shifts and changes of the adaptation of the Modern Movement in South Africa. References in the house include Le Corbusier, compositional influences from Fernand Léger (1881–1955), Renaissance frontality, Guiseppe Terragni (1904–1943) and Wassily Kandinsky (1866–1944) (Prinsloo in Beck, 1985: 59). The house became a prescribed Johannesburg post-war vocabulary (Chipkin, 2008:95).

However, WWII caused a discontinuity in the

17 For a short introduction to the Transvaal Group, refer to Appendix C.

18 The initial proposal for Miss Boyes was a quaint cottage. She was however the client for the more radical and first Modern Movement endeavour of the young Eaton in the next year. According to Harrop-Allin, Eaton must have 'bullied' her into the second, more 'radical' design (interview with Harrop-Allin).

19 For a short introduction to Bernard Cooke, see Appendix B.

pursuit of the ideals set forth by the Transvaal Group, and, together with Martienssen's sudden death in 1942, marked the end of the inherited orthodox Modern Movement in South Africa (Barker, 2012:79; Cooke, 1988:19; Chipkin, 1993; Chipkin, 2008; De Beer *et al*, 2000:102–109,112–118; Herbert, 1975).

2.1.3. Eaton and the second wave of the Modern Movement in South Africa

Although he had had a brief flirtation with Le Corbusier's use of metaphor for the machine age and Expressionist²⁰ curvilinear forms from 1934 to the War years, Eaton's work always pursued a regional and climatic responsiveness. Over time, his work especially resonated with the organic approach of Frank Lloyd Wright, who 'lurked in the background' (Cooke, 1988:17) for the Transvaal Group disciples. Leith had also agreed with Wright's belief that architecture should not lose its contact with the earth and the elemental forces of nature, denouncing the purist functionalism of the Le Corbusier-Bauhaus oriented International Style which had become prominent during the middle of his career (Harrop-Allin, 1975:14).

Eaton's first endeavours in the new architectural idiom, from his House Boyes (1934), Pretoria, onwards, resembled the box-like formal massing and horizontal strip windows and link walls of the International Style, but brickwork was often bagged, or left un-plastered, strip windows protected with extruded ledges and the houses were all oriented north for the best climatic exposure. House Viljoen (1934) was the first within the modern idiom to be introduced with a low pitched roof and by 1936, he started to furnish houses with pitched roofs along with deep overhangs. Partly as response to the bad weathering of the 'taut-skinned and flat-roofed idiom of the International Style buildings under Transvaal conditions' (Fisher, 1998:124), but Fisher also

suggests that his artist friend, Alexis Preller,²¹ might have propelled him on this path.

The failure of flat roofs was also seen in two of McIntosh's previous houses, including House Munro, which must have contributed to his subsequent more regionally-inspired approach and pragmatic solutions (Fisher, 1998:124). McIntosh's own house (1936–7), Pretoria, was atypical of the Transvaal Group idiom in the use of Gropius rather than Le Corbusier as formal precedent, and in the inception of a regional interpretation, indicated in the un-plastered brickwork and exposed concrete surfaces, similar to the work of Eaton (Cooke in Beck, 1985:60).

Another architect in Pretoria whose work diverged from that of the early Moderns, was Hellmut Stauch,²² who greatly admired the work of Eaton (Peters in Fisher *et al*, 1998:177). Stauch was a German, who only arrived in South Africa in the early 1930s and was therefore largely independent of local architectural directional drives. He commenced practice with Aubrey Nunn²³ sometime in 1935. Their work of the thirties 'recall[s] the floating roof aesthetic of the Barcelona Pavilion or the Wrightian prairie house' (From Peters in Fisher *et al*, 1998:177). While most South African references to the work of Le Corbusier had stressed his orthodox approach to architecture, the publication of his Mathes House (1935), Charente-Maritime, La Palmyre-Les Mathes, France, in the March 1938 issue of the *SAAR*, had an especially profound impact on Stauch (Barker, 2012:80).

Interestingly, Eaton's design for House Tosi, also of 1938, showed a conscious affinity to Le Corbusier's regional renderings. The later work

²⁰ See Appendix C.

²¹ For a short introduction to Preller, refer to Appendix B.

²² For a short introduction to Stauch, refer to Appendix B.

²³ For a short introduction to Nunn, refer to Appendix B.

of Stauch resonated with Le Corbusier and Jeanneret's Maison Errazuris, Chile (1930) with its butterfly roof and lightweight construction offset by local rubble stone. It seems that the regionalist leanings of Le Corbusier since the early thirties, however, were largely ignored by the followers of the Transvaal Group.

Pretoria architect, Cole Bowen's²⁴ rational interpretations were also merged with a sensitivity to locally sourced materials such as brick and slate shortly after WWII (Cole Bowen only registered as an architect after the war). Spatial economy was a major concern following the war years and plans were often organized to limit circulation space, with most relying on, for example, movement through dining spaces, as can be seen in the economic plans of Cole Bowen (Barker, 2012:99).

In Johannesburg, as early as 1936, architect Douglas Cowin²⁵ had designed 'a seminal synthesis of Wrightian roof and Miesian plan' (Barker, 2012:85) in his Casa Bedo, which paved the way in that city for an acceptable regional expression in domestic architecture.

In 1937, the Argus Ideal Homes Competition was launched nationally in an attempt to popularise the International Style Home in South Africa (Barker, 2012:90). Six of the nine winning entries were from two Johannesburg architects, and a number of the South African forward-looking architects entered. The vast majority of the entries were explorations of the Modern Movement, but interestingly, there were several with pitched roof designs. *The Star* afterwards noted that the South African house was slowly developing as a

low light building with dark flat pitched roof, large unobstructed windows sheltered by deep eaves ... this growing naturally out of its surroundings, may well be the South African style of the future, as the gracious

Cape Dutch was that of the past (Herbert, 1975:165).

The reports in the newspaper therefore suggested the outcome of the competition was a move away from purist architecture (Barker, 2012:90).

In 1942, the same year Martienssen passed away, a letter by Roy Kantorowich (1916–?) was published in the *SAAR*, which attacked the urban ideas of both Le Corbusier and Wright, accusing them of authoritarianism and even Fascism. The letter caused a debate for months to follow (Cooke in Fisher *et al*, 1998:232).

By 1945, technical problems were becoming apparent in the 1930s modern buildings. Besides the fact that the general public did not favour the new architecture (Herbert, 1975:230), criticism was strengthened by the observation that pre-war buildings designed by architects such as Eaton, Cowin and Stauch who used facebrick, pitched roofs and wide eaves, had lasted very well. Among many criticisms levelled at pre-War Modern architecture, Kantorowich maintained that plans from the Transvaal Group Modern Movement, had been valued for graphic quality rather than for functional appropriateness. He also held the view that the Corbusian spatial system resulted in wasted and awkward spaces (Barker, 2012:72, 99; Cooke, 1993:23).

As a result of the vilification of the Modern Movement, many South African architects were turning to unexpected sources of inspiration in the immediate post-war period. The exhibition entitled 'Art of Architecture', which was held in 1947 at Wits, testified to this in the dichotomy of architectural directions on display: from Vitruvian ideals to Brazil wall-tiling (Cooke in Fisher *et al*,

24 For a short introduction to Cole Bowen, refer to Appendix B.

25 For a short introduction to Cowin, refer to Appendix B.

1998:232). During the years to follow the war, one small group with a limited output turned to neoclassicist, rationalist, Perret-inspired revisions of the Modern that would exist to the mid-sixties; and another, to Brazilian modernity, which had a more prevailing and extensive influence, especially in Pretoria through the auspices of Eaton and Stauch.²⁶

An emergent tendency of a regional architectural approach through recognition of place and materials, as already manifested in the work of Hanson, McIntosh, Eaton, Stauch and Cole Bowen led to the development of a third Modern Movement (as per the international definition²⁷) in South Africa, as mediation between the Modern Movement canon and local circumstances.

According to Barker (2012:87), the regional tendencies that emerged as a result, were later defined as follows:

This has been referred to variously as a 'contemporary vernacular' of the Transvaal, 'Transvaal Vernacular', 'vernacular traditionalism' and a 'Third Vernacular'.

In Pretoria, the work of McIntosh, Cole Bowen, Stauch, and predominantly Eaton represented the so-called 'Third Vernacular' or Pretoria Regionalism (Fisher *et al*, 1998:123).

2.1.4. Pretoria Regionalism

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

Fisher (1998:123) highlights all the aspects that

characterize Pretoria Regionalism and by implication, the work of Eaton:

- Traditional plan-forms
- Rustic brick, either directly as clinker or as whitewashed stock
- Low-pitched iron roofs
- Deep shaded eaves and verandas
- Sun-shy windows
- Sensitivity to landscape and land features
- An architecture responsive to climatic constraints.

Fisher indicates that the prerequisites for a regional ethos were all present in Pretoria during the 1940s and 1950s. Building Controls from 1941 to 1946 restricted imported materials and together with limitations on construction technologies, architects had to improvise. A rich diversity of local building materials were readily available (such as thatch, slate and brick), and because Pretoria clients were often not financially proficient, more innovative uses of local materials were pursued (Fisher, 1998:123–140).

Furthermore, the establishment in 1943 of the first Afrikaans School of Architecture in South Africa at the UP contributed to the shift of architectural impetus from Johannesburg to Pretoria and the formation of a Pretoria vernacular. The School was founded at a time of material and monetary shortages, which fuelled an architectural education of simplicity and economy. Professor Adriaan Louw Meiring, the first head of the newly established school, had appointed, amongst others, Eaton, Cole Bowen and Stauch as lecturers, resulting in architectural education founded on pragmatism and the fostering of a regional bias (Barker, 2012:100).

²⁶ See entries 'Johannesburg Vernacular (1947–1965)' and 'Brazil Builds' respectively in Appendix C.

²⁷ See Appendix C for the definitions of the Modern Movement as delimited for the purposes of this study.

2.2. An Inheritance of place

2.2.1. Place

Eaton had set up practice in Pretoria towards the end of 1932 to early 1933. A worldwide depression had set in by 1930, and the majority Afrikaans-speaking population of the city felt its brunt until the mid-thirties. By the late 1930s to early 1940s, Pretoria was undergoing huge expansions. In fact, Sir Hugh Casson (1910–1999) dubbed it the ‘mushroom capital’ in an article that appeared in the August edition of the international journal, *Architectural Review* (1940:37). Planned on garden city principles, suburbs were divided into 67x36,5m lots, zoned for detached houses (Peters in Fisher *et al*, 1998:175). The greater part of Eaton’s work was executed in the city and its surroundings, responding to a strong sense of place:

Pretorians, coming largely from migrant farmer stock, have a strong sense of *genius loci* – spirit of place – because of direct ties to the land both through their history and enterprise. The landscape and climate of Pretoria make a strong impression (Fisher, 1997:72).

Set in-between natural enclosures of repetitive rolling koppies and rivers, place making in Pretoria was considered under universal, cultural, and contextual aspects (Jordaan, 1989:26). The indigenous vegetation of the city varies as considerably as the topography with the combined factors of north and south ridge faces. While tree portraits and landscape became a typifying aspect of local art, most important that of Pierneef, Eaton’s drawings and translation into built work reflected a sensitivity to this landscape. In scale, form giving and articulation of space, he would respond to the (then) openness of the landscape.

Houses, especially from his later work, were

crafted to modulate exterior space associated with the individual dwelling. Together with indigenous trees and shrubs, gardens, terraces and fountains would form an integral part of the dwelling and become extensions of it. The grounding of dwellings to the earth further enforced spatial connectedness to landscape: Eaton would never employ *piloti* to remove his design from the earth. His work had a material presence and sense of weight of facade that contributed to the sense of place. Main living levels in dwellings would usually be in a privileged position from which to view the landscape, which would unfold on one or more sides.

For his public work in denser urban fabric, buildings would metaphorically reference the natural surroundings. Where he had for example, rendered the Netherlands Bank in Pretoria (1948–1955) in heavier earthy, ochre tones to respond to the setting amidst koppies, the Netherlands Bank along the sub-tropical coastline in Durban (1960–1965), was rendered in cool hues of carefully selected blues and greens and a filigreed facade that commands attention and contributes to a very different sense of place.



Figure 3: ‘Farmstead with Acacia trees’, by Pierneef signed and dated ‘JH Pierneef 1932’ and indistinctly inscribed in pencil along bottom margin, woodcut on paper (19.7 x 24.8cm.) Image from the website of Christie’s, the world’s largest fine arts auction house.

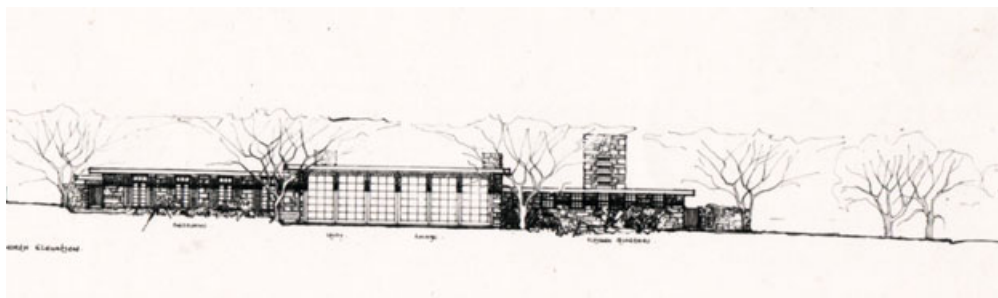
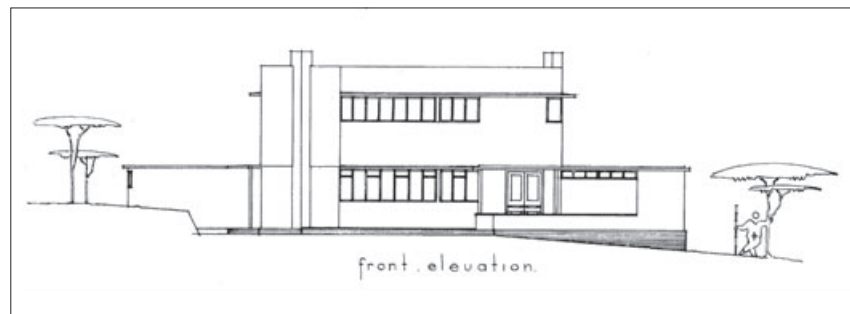


Figure 4 (top): Elevation of the **Boyes House (1934)** by Eaton. Typical of drawings from this period, references to the landscape were less pronounced, but still showed an affinity to indigenous vegetation and human scale. Notice the scale of the house in relation to the trees (From: Eaton Collection, UP Repository). **Figure 5 (bottom):** Eaton's sketch of the **Anderssen House (1949–50)** clearly demonstrates the horizontal development of his approach to the landscape, with blurred boundaries between nature and the man-made. Indigenous trees complete a canopy over the house (From: Eaton Collection, UP Repository).

2.2.2. Material and structure

Local artists like Pierneef (who had become a close friend) and Van Wouw and writers such as Gustav Preller and Eugène Marais, captured the essence of the natural order inherent in the Highveld landscape in their respective disciplines. These were enhanced by Afrikaans writings on architecture of the Highveld by Moerdyk, Pierneef and Leith (Prinsloo, 2000:94), which created in Eaton the inclination to reconcile the dichotomies of industry and art through the use of elements such as brick and tiles (Barker, 2012:105). In the article 'Art and Architecture' (*Fontein*, Vol.I no1, Winter 1960: 15–17), Eaton explained the unity of architecture and by implication, industry and art:

In painting, for instance, there is near home, the case of the 'Pierneef' trees, and clouds

and sunset skies of our Transvaal. This pinnacle of revelation has however, seldom been achieved without some kind of subtle 'orchestration'; without some deep sense or understanding of the complex nature of the thing; without using as a basis for creative effort all elements building up to that harmonious synthesis, that flowing, interweaving 'wholeness' which is Life itself. It is with this thought that I point to the Trees for the answer to the question 'what should the relationship be between Art and Architecture' ... in Art and Architecture as in Nature nothing can be dismissed as unimportant from the ensemble which is to have significant meaning. What in man-made things we might be inclined to separate as structure and embellishment we can, in Nature, easily see are mutually dependant parts of an indivisible whole (Eaton, 1960:17).

Eaton used local craftsmanship and materials, such as the humble brick, in unconventional ways and had bricks and glazed tiles custom-made to deliberately evoke African textural surfaces. In using brick, he was acknowledging an already existent Pretoria tradition (Fisher, 1997:79).

The common brick had much appeal throughout Pretoria's architectural history, disseminated through the architectural heritage of the Public Works Department (PWD) legacy,²⁸ which Eaton held in high regard (*ibid.*:77). In addition, brick as material held associations of the Arts and Crafts tradition, honesty of use, an inherent rectilinear geometry that resonated with Functionalism and also with 'Calvinist frugality' (*ibid.*:78) associated with Pretoria at the time.

During the war years, building controls were gazetted in July 1941 and remained in force until 1946. Restrictions were placed on skilled labour and materials such as steel, electrical conduits and corrugated iron. As a result, thatch became the accepted roofing material, resulting in attenuated building plans. Peters speculated that walls were bagged perhaps due to the restriction on skilled labour (Peters in Fisher *et al*, 1998:177).

Eaton combined local craftsmanship for thatch roof construction with parsimonious material use and construction choices, such as bagged and plastered rendering of walls and innovative use of bluegum and split poles. Rubble stone, found on site, would especially be used in his later work to 'ground' dwellings.

Standardized steel windows on a 3'4" (1016 mm) module became part of the Pretoria regionalist approach after 1936, when Iscor started to produce steel products locally, providing a structural logic to the work of especially Cole Bowen and Stauch and which became part of the aesthetic associated with the Pretoria vernacular (Peters in Fisher *et al*, 1998:185).

Post-war, Eaton used the modular grid as a design discipline, setting a rhythm and a frame-

work for patterns. The modular grid derived from standardized windows, would form the basis for his designs as evidenced in his drawings dating from 1948 onwards. While it was the result of standardized planning and had economic advantages, it had the added benefit of creating visual focus and disciplined composition of facades. In doing so, his architectural endeavours would build a stronger relationship between man-made and nature in much the same way as the symmetrical composition of a Cape Dutch facade holds its own against the imposing mountainous backdrops of the Western Cape. Essentially, his use of material, standardization and resultant ordering devices captured the essence of the 'wholeness' (Eaton, 1960:16) as manifest in the natural order inherent in the landscape of Africa and the Transvaal.

2.2.3. Planning

Reflected in all aspects of domestic planning of architects of the time, life in South Africa used to be spent out of doors. In particular, in Pretoria (before air-conditioning units met the pseudo-Tuscan escapism of the *nouveau riche* towards the late 1990s), the loggia, stoep or veranda was traditionally used more than any other room in the house.

It became structurally possible to open the lounge widely to the garden and socially acceptable to finish the lounge with hardy materials rendering it informal, as a semi outdoor room. One could then 'sit inside yet feel outside' (Peters in Fisher *et al*, 1998:176).

²⁸ The architectural heritage of the PWD can be traced back to Karl Friedrich Schinkel (1781–1841). According to Fisher (1998:77–78), Schinkel had studied the worthiness of the material extensively and had disseminated his knowledge through the Public Works Department (PWD) which in turn reached Sytze Wopkes Wierda (1831–1911) who was responsible for various local major public commissions.

All of Eaton's projects would also have a defined outside perimeter that would usually extend from the semi-outside room. In terms of the domestic planning of the time, it is also noteworthy that the usual relationship of servants' quarters to the house would be of a separate grouping of buildings to the main house (Peters in Fisher *et al*, 1998:176).

2.3. African lineage

Le Corbusier was amazed to find 'such youthful conviction ... something so alive in that far away spot in Africa' (Gerneke in Fisher *et al*, 1998: 209). He was, of course, referring to the Transvaal Group who had advocated his early architectural doctrine. It is interesting to note, Le Corbusier's work was influenced by the Spanish painter and sculptor, Pablo Picasso, who had opened the gateway to Cubism when he painted 'Les Demoiselles d'Avignon' in 1907²⁹ (Joubert, 1999:54–60).

In turn, Picasso was inspired by African art. Although he never visited Africa, his interest in its art is well documented, from his discovery of African masks at the *Musée d'Ethnographie du Trocadéro* in Paris in June 1907. Thereafter, he became an avid collector of the so-called 'art nègre'³⁰ (Joubert, 1999:51–52).

The space between Europe and Africa often captured artists' imaginations, and has been demonstrated in a series of topical retrospective exhibitions and publications. Amongst these was the recent exhibition in 2009 of the work of Eaton's close friend Alexis Preller entitled, 'Alexis Preller: Africa, the Sun and Shadows' and the subsequent publication in 2011 of Preller's major works illuminating the development of the artistic forms and idioms with which he gave expression to his unique vision of Africa. In addition, the retrospective exhibition in 2005 of Walter Battiss, the 'Gentle Anarchist', for whom Eaton

had designed a house, attested to the profound impact ancient African rock art and Ndebele beadwork had on his work.

The 'Picasso and Africa' exhibition (2006) reaffirmed the interest in the space between Europe and Africa.³¹ It also brought different and new perspectives to the subject of African art history.

The work of Eaton provides opportunity within the architectural realm. His architectural *oeuvre* expresses a rare encounter between the Modern Movement and Africa, which sets his work

²⁹ Picasso's work influenced some of the most profound buildings of the mid-twentieth century by Le Corbusier. His early work – designs for mass-produced concrete houses, including the Domino House of 1914–15 and the car-like Maison Citrohan of 1925, as well as the first of his famous white villas for artists and collectors – were self-consciously influenced by cubism (Joubert, 1999).

³⁰ However, Picasso himself remained vague on the subject, once famously declaring 'L'art nègre? Connaiss pas' [African art? Never heard of it]. (Picasso's words were transcribed by Fels F., 'Opinions sur l'art nègre', *Action*, Paris, 1920; and Daix, P., 'Il n'y a pas d'art nègre dans les Demoiselles d'Avignon' in *Gazette des Beaux-Arts*, Paris, October 1970. Both are quoted in Anne Baldassari, 'Corpus ethnicum: Picasso et la photographie coloniale', in *Zoos humains. De la Vénus hottentote aux reality shows*, Nicolas Bancel, Pascal Blanchard, Gilles Boëtsch, Eric De-roo, Sandrine Lemaire, edition La Découverte (2002), p.340–348).

³¹ The Standard Bank Gallery in Johannesburg hosted all three exhibitions. In his address at the media announcement of the 'Picasso and Africa' exhibition in 2006, the Minister of Arts and Culture, Dr. Z. Pallo Jordan, said:

'What is of major significance to us and the rest of the continent is the juxtaposition of artworks by Picasso and works from Africa, reflecting the impact that African art has had on important movements in the history of modern art, and specifically on such a great artist as Picasso. 'Picasso and Africa' offers an opportunity to explore the complex relationship between Africa and the rest of the world. It could also serve to cast an even clearer light on the art history of our own country.'

apart from his architect peers, and strengthens his position as belonging to a so-called 'other tradition of Modern architecture' (St. John Wilson, 2007:15).

He loved being in Africa and of Africa. His concept and spaces and proportion and materials were derived from and concerned Africa: light and shade and vast areas of empty space, natural forces of rock and stone and desert plants and trees, a fusion of the elements of a continent and its creative traditions (Harrop-Allin, 1975:9).

The patterns, crafts, sculpture, weaving, clay, stone and bone work Eaton found (on his travels through Africa) were all materials and designs that led him to arrive at something that he would describe as the 'beautiful African quality', a quality of the continent he was born to, aspired to live in and to which he contributed so well in his field of endeavour (*ibid.*:24).

Instead of superficial translation or embellishment, Eaton's architectural appropriation of his observations in Africa clearly led towards a deep understanding of his subject matter. He had fastidiously documented visits to East and Central Africa in a small series of sketchbooks, letters and diaries from the early 1940s onwards.

Similar to Marco Frascari's interpretation of Veneto architect Carlo Scarpa's use of detail by comparing drawings and built objects,³² the keen observation of African art, craft and architecture and the translation thereof into built form can be analyzed in the drawings and built work of Eaton:

Scarpa's grainy drawings had explored details with partially coloured, layered sections, elevations and analytical multi-dimensional vignettes, in line with local craftsmanship. Scarpa's drawings continued to vividly support the process of

construction; while Eaton often transformed his careful travel sketches into built form. Scarpa's execution of detailing resulted in visual connectedness of spaces, whereas Eaton reinterprets African patterns into surfaces that bind elements in space.

Eaton's travel sketches are careful and controlled, annotated and mostly dimensioned with absolute precision. His diaries are factual, composed and exacting descriptions of daily routines and explorations, especially in his earlier years. By contrast for example, the diary sketches of Finnish architect, Alvar Aalto, brimmed over with impressionistic imagery.³³ Aalto's design sketches also illustrate how he worked simultaneously from the inside out and from the outside in.

Eaton rarely did perspective drawings and never expressive imagery. This would remain a trait throughout his life. He would seldom diverge into emotive or expressive rhetoric. Comments on the work of other architects would be limited to one-liners. For instance, after having met Mies van der Rohe and seeing a selection of his work, he commented in his diary that he found it 'precise, hard and cold ... to a degree ... not expected to find in someone like Mies van der Rohe as much as in someone like say Gropius' (Eaton's diary entry on 1945-10-15, Eaton Collection). When he left the Taj Mahal in India years later, hailing it the 'glory of glories', it was with

32 Frampton, K. 1990; 1996. 'Rappel A L'Ordre, The Case for the Tectonic', *Architectural Design* 60, no. 3-4:19-25; republished in Nesbitt, K. (ed.), *Theorizing a new agenda for architecture – an anthology of architectural theory 1965-1995*. New York: Princeton Architectural Press, 518-529 and Frascari, Marco. 1984; 1996. 'The Tell-the-tale Detail', *The Building of Architecture*: 23-37; republished in Nesbitt, K. (ed.), *Theorizing a new agenda for architecture – an anthology of architectural theory 1965-1995*. New York: Princeton Architectural Press, 500-514.

33 Ford, Edward R. 2003. *The Details of Modern Architecture*. Volume 2: 1928-1988. MIT Press, 117-119.

'a lump in the throat' (Diary entry 1962-9-16, Eaton Collection).

In his travels along the African East coast, Eaton would map out his journey carefully, often including meticulous travel times. Drawings were

made of settlement layouts, building plans, 'pace' measured as he referred to it; textures, dimensioned patterns, doorways and facades, and often small objects. Each drawing would be thoroughly annotated and dated.

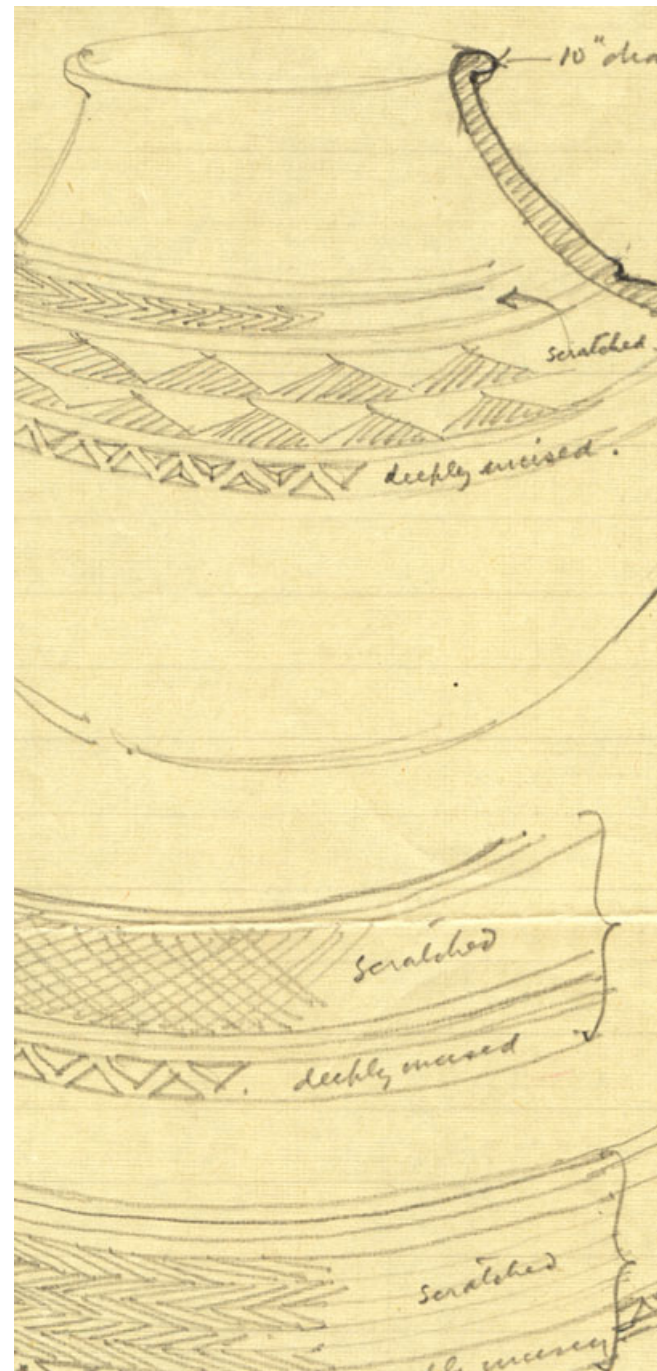
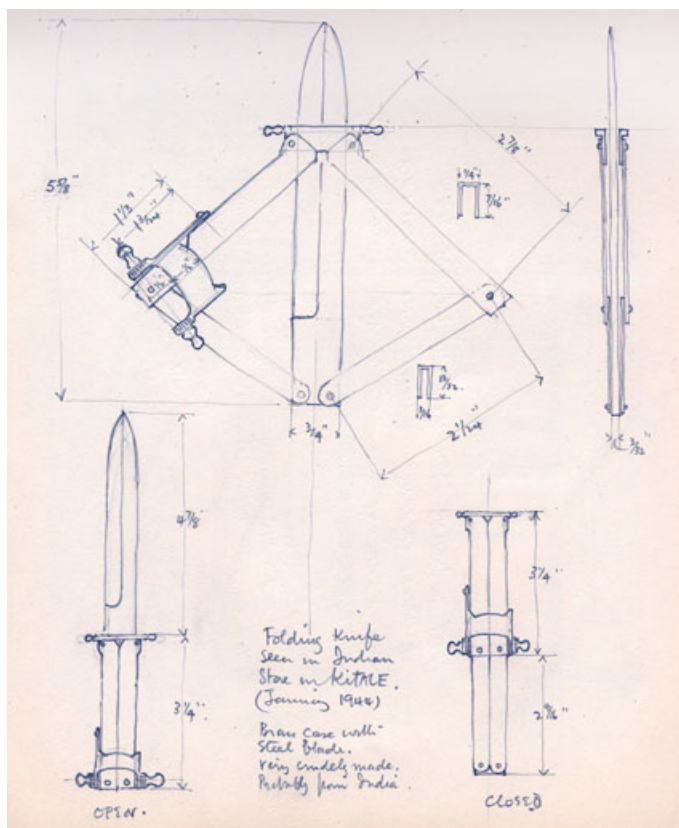
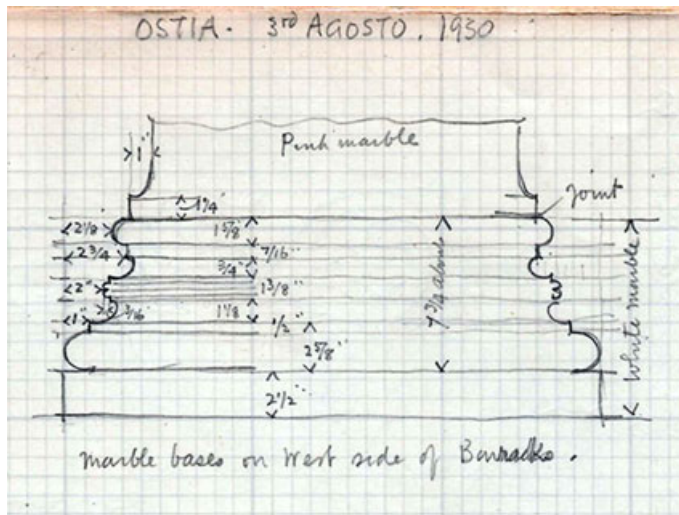


Figure 6 (top): Drawing from Eaton's 1930 sketchbook, showing a marble column base at Ostia (From Eaton Collection). **Figure 7 (bottom):** A sketch of a folding knife that Eaton had seen in an Indian store in Kitale, dated January 1944 (From Eaton Collection).

Figure 8: An extract from Eaton's diaries, dated '9/7/41', showing a pot from the Lake Nyara area, Tanzania (From Eaton Collection) (Detail).

Photo journals of his African journeys were carefully considered architectural compositions of ruins, thresholds, textures and streets. The same image would often be duplicated at two scales in his albums – one would be a small vignette, the other an enlarged image. The intention was clearly to observe different aspects of the same subject matter. A few unidentified modernist structures of architectural merit that he had encountered on his African travels were also included towards the back of journals.

His empathy for indigenous Southern African architecture was largely the outcome of an intimate association constructed through many visits around Pretoria to the little family kraals of the Ndebele (Mapoch). Describing a kraal at Baviaanspoort near Pretoria, Eaton spoke of the

way in which the architectural ensemble was ‘woven out of, and almost wholly dependent upon, the earth and the products of nature from which it drew its materials’ (Direct quote of Eaton in Harrop-Allin, 1975:68).

Eaton’s observations of indigenous architecture, became a commentary upon South Africa’s ‘European’ way of life. On the authority of Harrop-Allin (1975:68), Eaton had described the latter ‘as manifested in the complex, disharmonious, ostentatious and chaotically ugly ensembles’. Similar to Cape Dutch architecture, indigenous and African architecture held vital lessons for Eaton in responsiveness to nature, simplicity, honesty, pattern and texture – aspects that Eaton strove to embrace in his architectural endeavours.

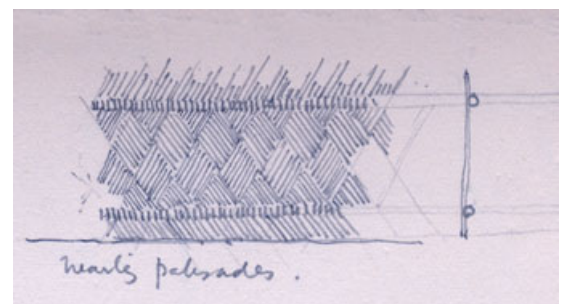
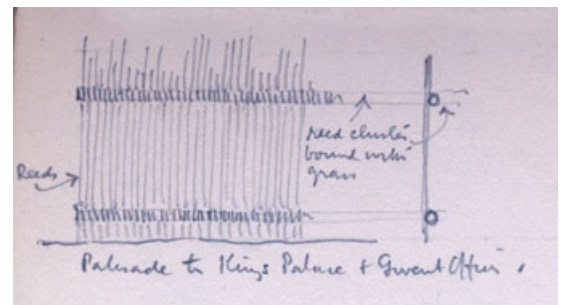
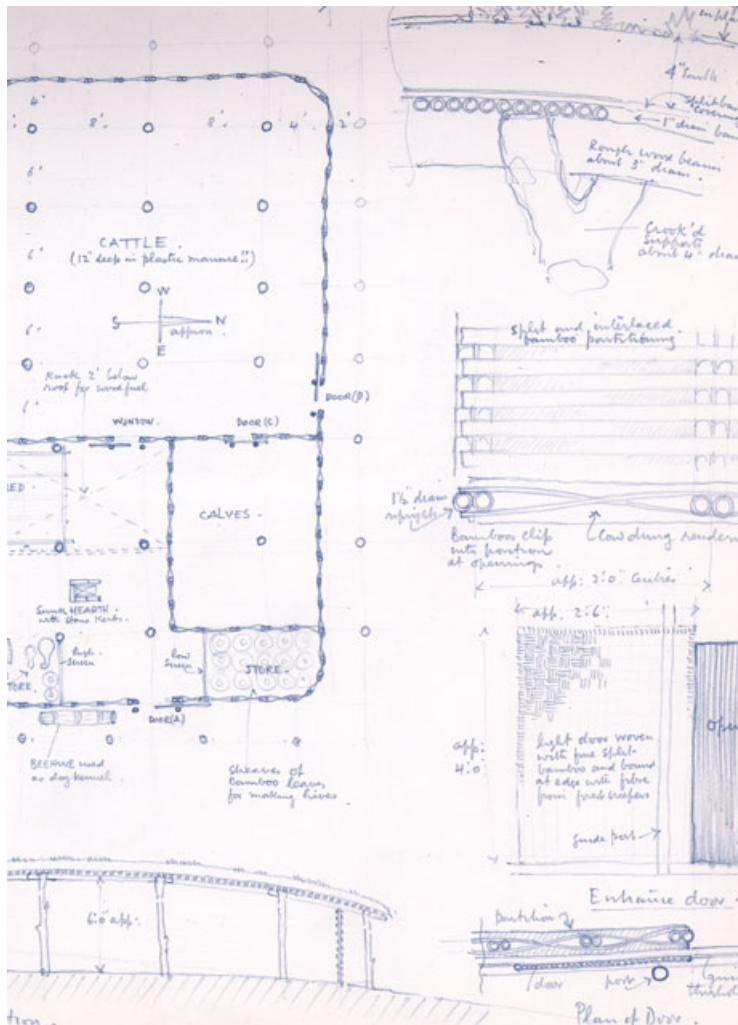


Figure 9 (left): Eaton’s documentation of a Masai Manyatta from his 1944 diary (From Eaton Collection). **Figure 10 (above):** An extract from Eaton’s 1943 diary, showing sketches of weaving (From Eaton Collection) (Detail).

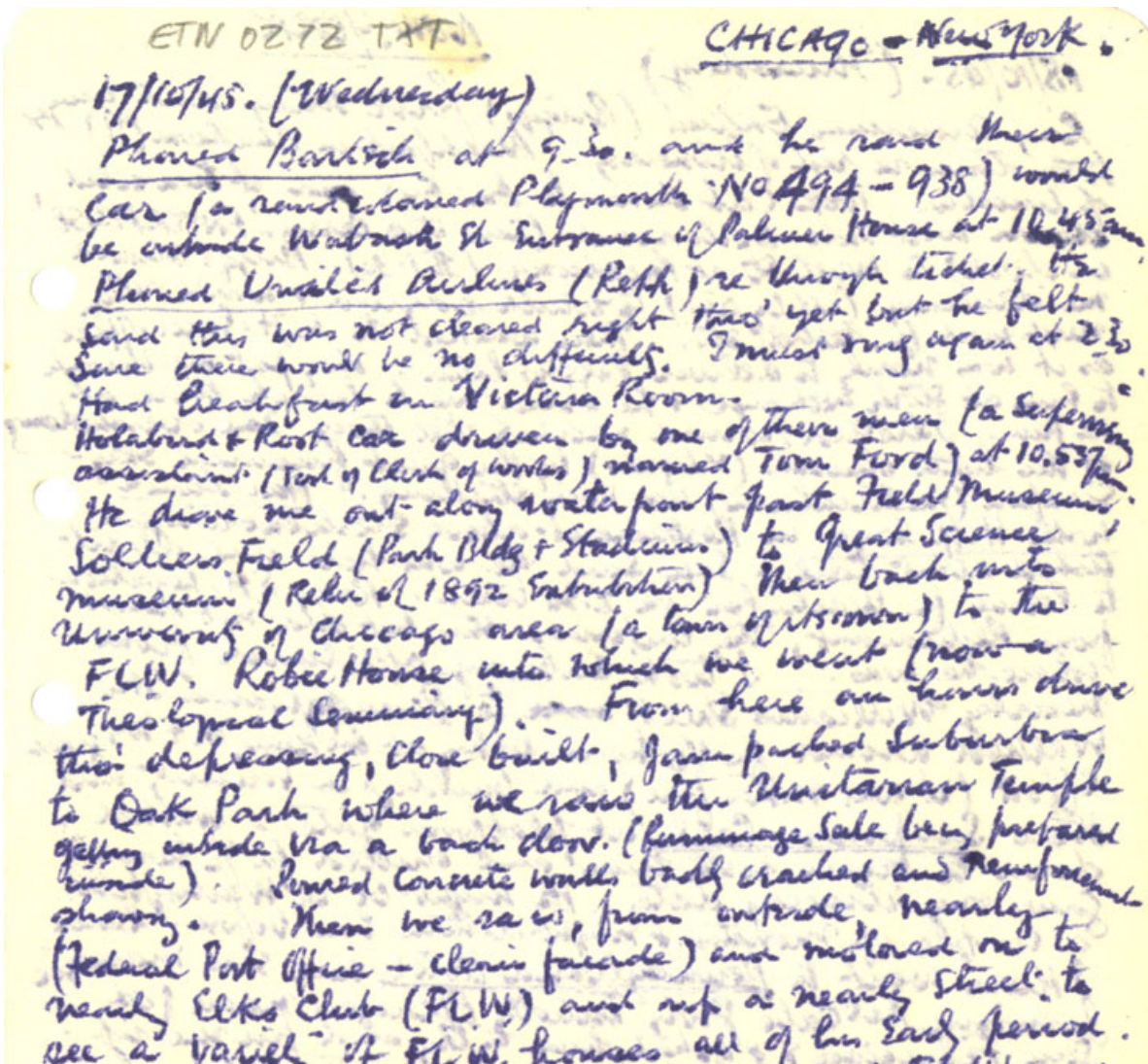
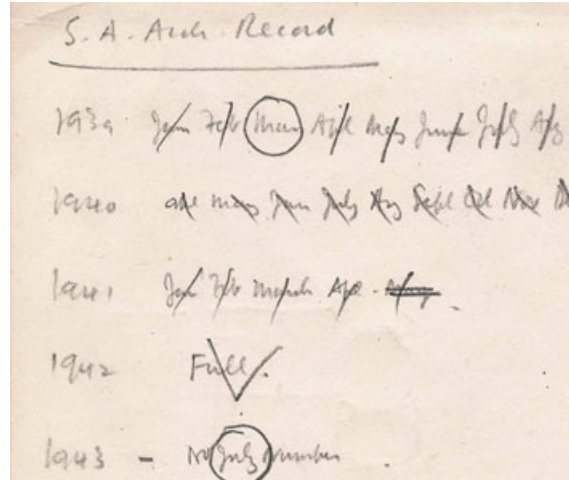
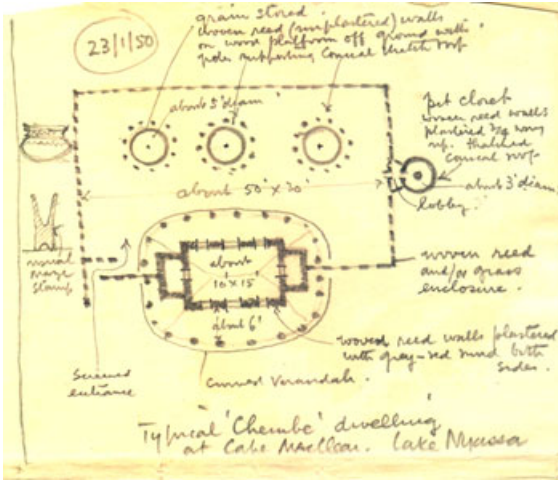


Figure 11 (top left): Eaton's drawing of a Chembe dwelling, Lake Nyara, 1950. Figure 12 (top right): Extract from Eaton's diary — List of his architectural journals (Eaton Collection) (Detail). Figure 13 (bottom): Extract from Eaton's diary on 1945-10-15 (Eaton Collection), which mentions a visit to the Robie House.

2.4. Summary of the contextual setting

Chapter 2 identified the contextual milieu of Eaton's frame of reference and appraised the processes that shaped his designer's mind.

The architectural setting that formed the backdrop to his evolution as a designer included his early exposure to Cape Dutch architecture; and through a small group of seminal personalities, the Arts and Crafts movement, the Italian Renaissance and ultimately, Afrikaner Nationalist ideals towards a place-specific architecture. Within the ambit of the Modern Movement, Eaton's work responded to local circumstance, which contributed to the development of a so-

phisticated regional modern architecture in Pretoria. Both the physical and cultural landscapes of Pretoria moulded sensitivity in his response to site; and a singular approach to the making of architecture in the poetic handling of local materials, detailing and craftsmanship.

Ultimately, what set his work apart from his peers was his distillation of an African consciousness. Eaton's documentation of his African travels and observations of indigenous architecture reveals his disciplined, serious, and consistent nature and ability to appropriate his observations towards a deep understanding of his subject matter.

CHAPTER 3

TRANSLATION TO AN EVOLUTION OF FORM, SPACE AND ‘MOTIF’



After having arranged Eaton’s collection of drawings chronologically, it was easy to start recognizing formal characteristics presented by his drawings that hold in common established groupings, roughly defining types of approaches in relation to the contextual and biographical setting of his work. Plan composition and patterns emerged with clarity to aid in providing a broad taxonomy of his work. The chronological study of his drawings also allowed for the tracing of African and other influences in relation to his travels, as documented in the UP Repository.

The following chapter traces the chronological evolution of Eaton’s residential work and highlights the three main periods in his domestic design *oeuvre* in relation to the *esprit de système*.

While the study is limited to his residential output, those projects and works of types other than domestic that assist towards a critical understanding of Eaton’s output are included. The chapter highlights the critical moments in Eaton’s development.

From the chronological study of his drawings, three periods are distinguished in his design *oeuvre*. It should however be noted that master architects such as Eaton tend to carry a residue of ideas forward to other projects over many years. Although the dates do not strictly concur with those of World War II (WWII) from 1939 to 1945, the era before the restrictions on building materials, gazetted in 1941, is called ‘the pre-war period’. Building controls came into place from July 1941 and remained in force until 1946, making up the ‘War period’. The post-war period follows from 1946 onwards:

- 1930–1940: The pre-war period
- 1941–1945: The war period
- 1946–1966: The post-war period

The chronological index was compiled from the original drawings in the Eaton Repository of the Department of Architecture, UP. All drawings are available on the UP Repository, UPSpace.

Each project is introduced with factual information about the project:

Title Title as it appears on the drawings. The sign * indicates whether or not the project was realized according to the information at hand at the time of publication.

Location As per the drawings

TOPi Reference number(s) TOPi (*Trefwoordstelsel vir die Ontsluiting van Plan-inligting* [Keyword System for the Retrieval of Plan Information]) There is often more than one reference code.

Date(s) as per drawing(s) As it appears on the drawing (s). The projects appear in sequence according to the year in which planning commenced.

Keywords Keywords for cataloguing purposes
Signed Norman Eaton's signature authenticates drawings.

Description and/or reading:

A description and reading of the project follows the above factual index. The reading is the researcher's own interpretation of the project, based on primary sources (Eaton Collection, UP) and secondary sources (such as other individuals' writings).

Drawings

Please note the following:

- Due to space constraints, only one drawing of a specific project is included in the following text, unless the researcher wanted to highlight particular aspects only evident in a representation of more than one drawing. (There is often only one drawing of a project in the repository).
- If the project is not of special significance to the study, a thumbnail of the original drawing of the project is included, or no drawing is included.
- Drawings have all been rescaled from original size to fit within the format of this document, and often lost original quality as a result.
- While the focus of the investigation lies on Eaton's domestic work, non-residential projects of special significance to the analysis and understanding of his work are also included.

3.1. 1930–1940: The pre-war period

According to the UP Repository, Eaton did roughly 50 residential projects during this period, three of which were set in Johannesburg. Houses for prominent personalities during this period in-

clude the Houses Van Wouw and Battiss. In addition, Eaton assisted with the design of Pierneef's Elangeni (1939). Notably, he also designed the house (1938) for well-known advocate and political figure Bram Fischer.¹ This house would play an important role as symbol of the struggle for democracy in later years.

Drawings and translations to built work from the pre-war period show diverse influences – from the Cape Dutch, Arts and Crafts to Eaton's translations of the Modern Movement. He was still coming into his own as a designer, evident in the oscillation of formal influences of work performed during this period. The latter influences are also reflected in Eaton's drawing style, with for example *sans serif* stenciled typeface and crisp lines reserved for the rendition of those projects that reflect the Modern Movement.

Interestingly, there would often be a first design proposal for a client with a more traditional approach, followed by a bolder proposal in the modern idiom – a few cases in point being the initial and then later proposals for Houses Boyes, Gascoyne and Borckenhagen. Eaton would also very often do more than one scheme for clients, where one would be a scaled-down version of the other, with the construction cost included.

According to the information at hand in the UP Repository, Eaton had been to Egypt during 1932, Europe during the period from 1930 to 1932 and 1934 respectively, and would only visit eastern Africa for the first time during 1941.

As part of the *esprit de système* of the early thirties, he used chevron patterning in his early work, possibly also inspired by Moerdyk. The first evidence of an African sensibility in his domestic work can be found in House van der Merwe (1940–1941), Magaliesburg, where he intentionally translated African textures into alternating brick coursework. (Although Eaton

¹ For an introduction to Fischer refer to Appendix B.

used ‘faggoting’² tiles for the first time in House Kling (1936) there is no proof that it was done so as to metaphorically evoke African textures).

Public work from this period varied from alterations and additions to existing structures, blocks of flats, schools, hostels, a Children’s Health Resort, Native Baths, the Children’s Art Centre (1940) and his very first scheme for the Land Bank in Ermelo (1940).

1928

Title Redrawn project, House Stellenberg

Location Wynberg, Western Cape

TOPi Reference number(s) 07260

Date(s) as per drawing(s) 14.8.28.

Keywords Cape Dutch, historical residence, 18th Century, Professor G. E. Pearse, student documentation, site layout, plans, sections, elevations

Published in Pearse, G.E., 1933. *Eighteenth Century Architecture in South Africa* (Cape Town: A.A. Balkema). **Plate 54**—Stellenberg. Layout **Plate 55**—Stellenberg. Plan **Plate 58**—Stellenberg. Facade (drawn by J Fassler after measured drawings by N M Eaton) **Plate 59**—Stellenberg. Plaster details (as above) **Plate 61**—Stellenberg. Joinery details (as above) **Plate 63**—Stellenberg. Details of metalwork (as above)

Eaton was part of a select group of students at the University of the Witwatersrand who re-drew eighteenth century Cape Dutch architecture and furniture for Professor Geoffrey Pearse (Harrop-Allin, 1975:22). Pearse had taken them on a field trip to the Cape during 1928. Their documentation was published in 1933 in Pearse’s book *Eighteenth Century Architecture in South Africa* (Cape Town: A.A. Balkema, 1933). Eaton’s drawing of the Stellenberg house is a watercolour presentation with several details of the Cape Dutch design. Some of the details were drawn by John Fassler³ from Eaton’s measured drawings. Eaton would admire the simplicity and appropriateness of Cape Dutch architecture

throughout his career, as seen in the many manifestations of its traits in his work to follow. (See figure 2.)

1930

Title ‘The Laurels’ Cottage for Mr. Price*

Location Mackenzie Street, Brooklyn, Pretoria

TOPi Reference number(s) 07000 and 02002

Date(s) as per drawing(s) No date on drawings, 1930 is the date assigned according to the TOPi records

Keywords Residential, Cape Dutch influences, Arts and Crafts, Critical Regionalism, climatically responsive, Leith, Moerdyk, *Afrikaanse woonhuis* [Afrikaans residence]

Signed N.M. Eaton M.I.S.A.A. Architect, Pretoria

Possibly the first commission of the young architect, ‘The Laurels’ attests to the description of Eaton as the ‘heir to a domiciled National Romanticism’ (Chipkin, 2008:375). The symmetrical H-plan, with pergolas on both southern and northern sides, is typical of Cape Dutch houses as previously also disseminated by his mentor, Gordon Leith in the Transvaal. Besides flanking gables, Leith – a member of the so-called Baker School (Fisher *et al*, 1998:79–92) – added recessed loggias as a response to climate.

The design also reminds one of the work of Gerard Moerdyk. While Moerdyk had propagated architecture distinct from Cape Dutch (*ibid.*:124), the plan of the *huis vir ’n warm distrik* [house for a warm district] as published in the *Die Boerevrou* (1924, 1989:33) is recalled.⁴

- 2 A bundle of sticks, twigs, or small branches of trees bound together, word of unknown origin. (From the online Oxford English Dictionary accessed at <http://www.oed.com/viewdictionaryentry/Entry/67623> [Accessed 12/01/2013]) Eaton used ‘faggoting’ tiles (with a texture on its surface) to recall African tribal grass in his Bank buildings (Harrop-Allin, 1975:80).
- 3 For an introduction to Fassler, refer to Appendix B.
- 4 Refer to Motif Sheet 1, Chapter 4.

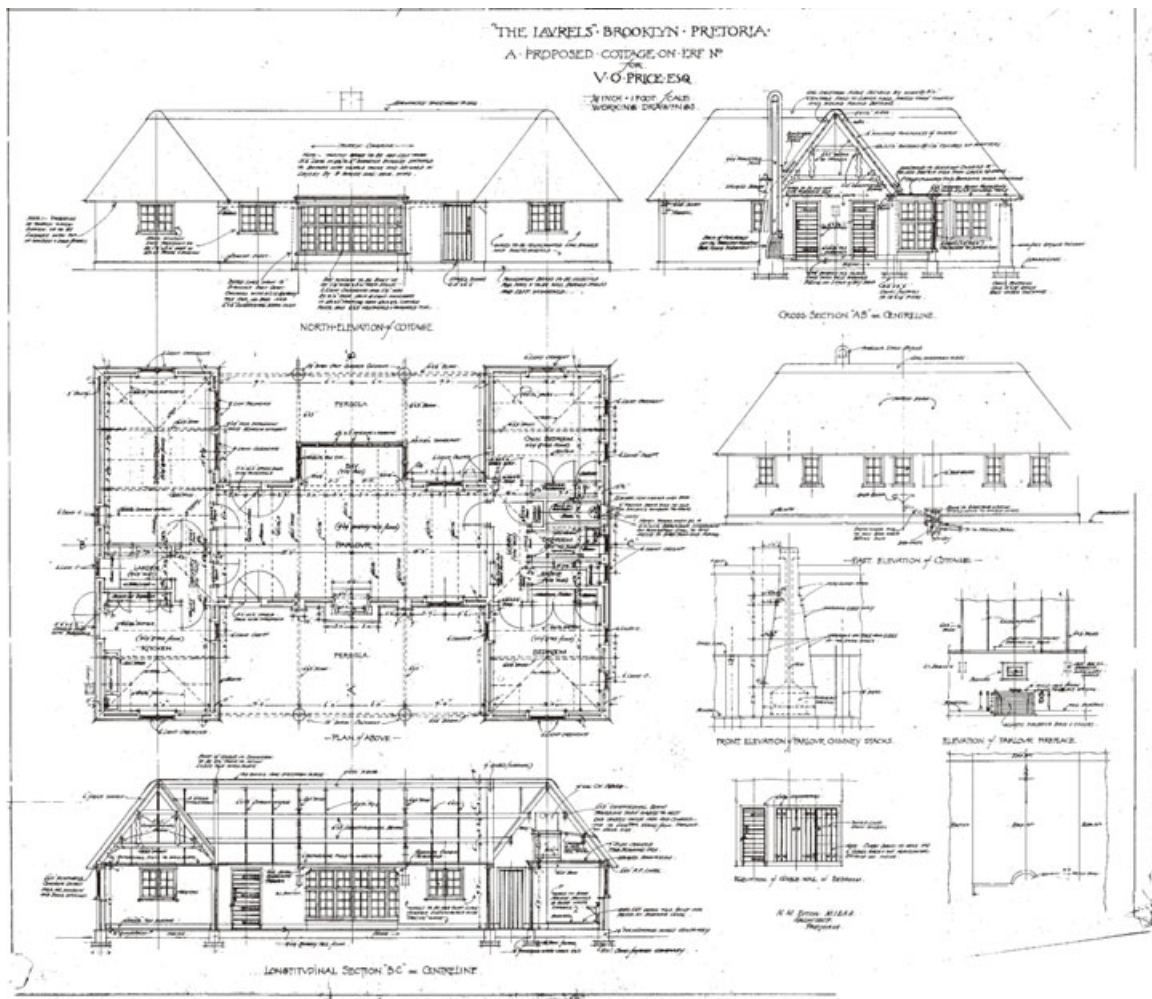


Figure 14: 'The Laurels' Cottage, Mackenzie Street, Brooklyn, Pretoria (c.1930).

As propagated by both Leith and Moerdyk, Eaton's design is climatically responsive – a trait that he would follow throughout his career. Except for the Baroque-like detail of convex and concave curves for timber truss members, the cottage is almost stripped of ornamentation. Together with the rounded chimney detail, thatched roof and whitewashed, bagged walls, pergolas, timber window frames and doors, the Cape Dutch and Arts and Crafts legacies are both recalled. Yet the house contributes to the lineage of the so-called *Afrikaanse woonhuis* [Afrikaans home] that would belong to the Transvaal.⁵

The house must have been done in the period when he was studying in Rome. The drawing is signed: N.M. Eaton M.I.S.A.A. Architect, Pretoria, but, unlike Eaton, no date is indicated on the drawing. The date of 1930 assigned to this project, is according to the TOPi records of the UP. The researcher speculates that the date might be towards the end of 1932.

1932

Title Farmstead for Mr Hill

Location Near Lunsklip, Transvaal

TOPi Reference number(s) 07733

Date(s) as per drawing(s) '28.10.32'

Keywords Residential, Cape Dutch influences, Arts and Crafts, Critical Regionalism, climatically responsive, Leith, Moerdyk, *Afrikaanse woonhuis* [Afrikaans residence]

Signed Norman Eaton ARIBA M.I.A. Architect

It appears that, together with the alterations to the Barclays Bank, Farmstead Hill was one of the only two commissions for the young Eaton during the year 1932 – the year he would be returning to South Africa after having completed his studies in Rome. The Munro House in Brooklyn, by Gordon McIntosh, would be completed during this year – and would become the first

modern house to be published in the *SAAR*, June 1932.⁶

Farmstead Hill is once again a symmetrical H-plan with a timber and thatched roof. Moerdyk had propagated that

vir 'n plaashuis is niks mooier en praktieser as die grasdak; dit hou die huis koel in die somer en warm in die winter [for a farmstead there is nothing more beautiful and practical than a thatched roof; it keeps the house cool in summer and warm in winter] (Fisher, Le Roux, 1989:11).

Quite different from the Laurels Cottage, a deep entrance loggia along the side is articulated with the scale of the central roof. The resultant double-volume expresses the major living space with exposed trusses – typical also of Moerdyk and Leith, and a Wrightian trait (Hildebrand, 1991:23–27). The roof extends beyond the walls to cover outside walkways on either side of the main living room, taking the usual corridor beyond the envelope of the house, so that each room almost becomes a 'pavilion' under the roof. Walls are slightly slanted at the ends of major spaces – perhaps inspired by Wright as an alternative to the traditional bay window.

Wright had used angles to define edges or terminate spaces throughout his career (Laseau, Tice, 1992: 18–19).

5 Refer to Chapter 2 of this document, as well as Appendix B, for the role that both Pierneef and Moerdyk had played towards advocating a domestic architectural language appropriate for the Transvaal.

6 See Motif Sheet 3, Chapter 4.

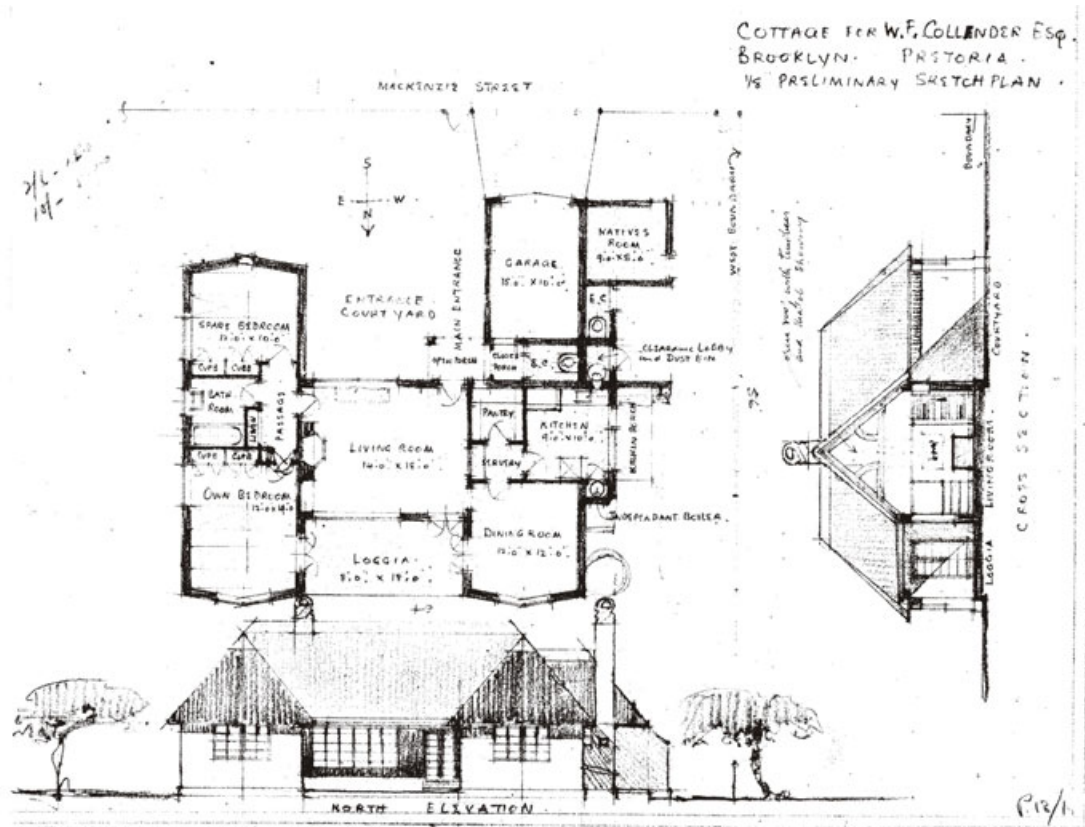
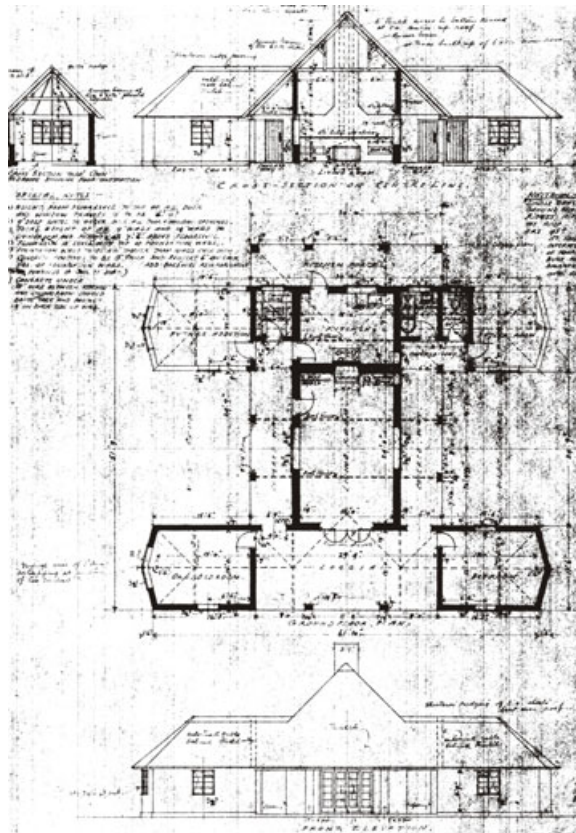


Figure 15 (top): Farmstead for Mr Hill, near Lunsklip, Transvaal (1932).
Figure 16 (bottom): Cottage Collender, Mackenzie Street, Brooklyn, Pretoria (1933).

1933

Title Cottage Collender

Location Mackenzie Street, Brooklyn, Pretoria

TOPi Reference number(s) 07573

Date(s) as per drawing(s) '27.4.33'

Keywords: Residential, Cape Dutch influences, Arts and Crafts, Critical Regionalism, climatically responsive, Leith, Moerdyk, *Afrikaanse woonhuis* [Afrikaans home]

Signed: Norman Eaton Architect ARIBA

While the H-shaped plan still recalls the Cape Dutch tradition, the design is less disciplined with irregular distortions accommodating services. A courtyard acts as threshold to the south with an asymmetrical entrance porch to one side. A loggia is created to the north. The design proposal is once again a thatched roof with exposed timber trusses. Similar to the Laurels Cottage, curved truss details become integrated decorative elements. Walls are once more slightly pointed at the ends of major spaces. The twisted chimney detail, ornamental truss detail, thatched roof and asymmetrical cottage recall both the Arts and Crafts inheritance and Baroque Cape Dutch influences whilst continuing the enterprise towards an architectural language appropriate for the Transvaal (Fisher, Le Roux, 1989).

Title Cottage Moggeridge

Location Brooklyn, Pretoria

TOPi Reference number(s) 07827

Date(s) as per drawing(s) '28.4.33'

Keywords Residential, Cape Dutch influences, Arts and Crafts, critical regionalism, climatically responsive, Leith, Moerdyk, *Afrikaanse woonhuis* [Afrikaans home]

Signed Norman Eaton ARIBA Chartered Architect

The cottage is an Arts and Crafts-like, asymmetrical design with a small entrance loggia. The northern wall of the living space is slightly slanted – again perhaps inspired by Wright as an alternative to the traditional bay window. Similar to

Wright's work, the double volume articulates the living quarters, expressed in the vertical outside window, with lower ceilings for other spaces. However, Wright would not have compromised the horizontality of the composition to achieve this effect (Hildebrand, 1991:20). The space/attic under the thatched roof serves as the bedroom zone.

A note states the cost of the house as £1255, but Eaton had also proposed an alternative scheme, which would amount to the sum of £950.

Title Cottage Boyes

Location Corner of Clark and Pienaar Streets, Brooklyn, Pretoria

TOPi Reference number(s) 00156

Date(s) as per drawing(s) '19.5.33.'

Keywords Residential, Cape Dutch influences, Arts and Crafts, Critical Regionalism, climatically responsive, Leith, Moerdyk, *Afrikaanse woonhuis* [Afrikaans home]

Signed none

The initial proposal for Miss Boyes: a very modest, T-plan cottage with chimney reminiscent of the Cape Dutch inheritance. The major living space opens up to a stoep to the north. According to Harrop-Allin, Eaton must have 'bullied' her into the second, more 'radical' design (Interview with Harrop-Allin).

Title Cottage Smook

Location Sunnyside, Pretoria

TOPi Reference number(s) 07584

Date(s) as per drawing(s) '4.12.33'

Keywords: Residential, Wright influences, Mendelsohn, expressionist semicircular corners, compact plan

Signed: Norman Eaton ARIBA Chartered Architect

A Wrightian low-hipped articulated roof appears for the first time in this compact design, as does the articulated division of facade, low bounding wall, and horizontal emphasis on windows. The

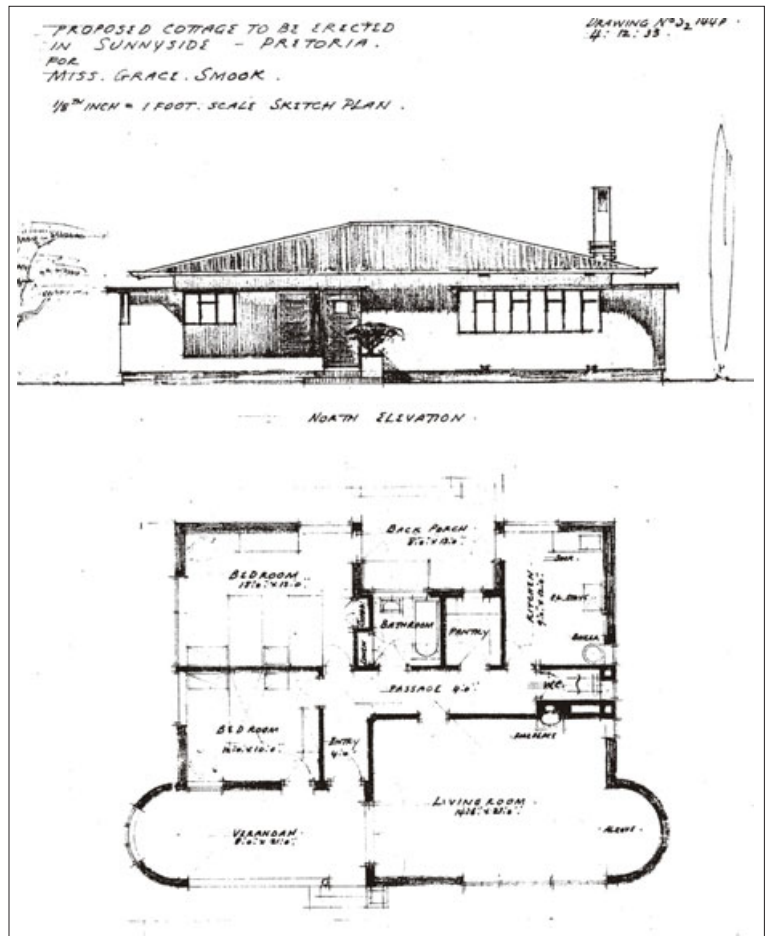
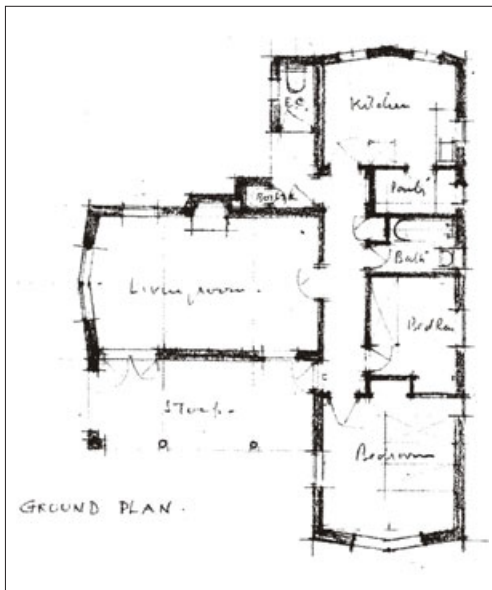
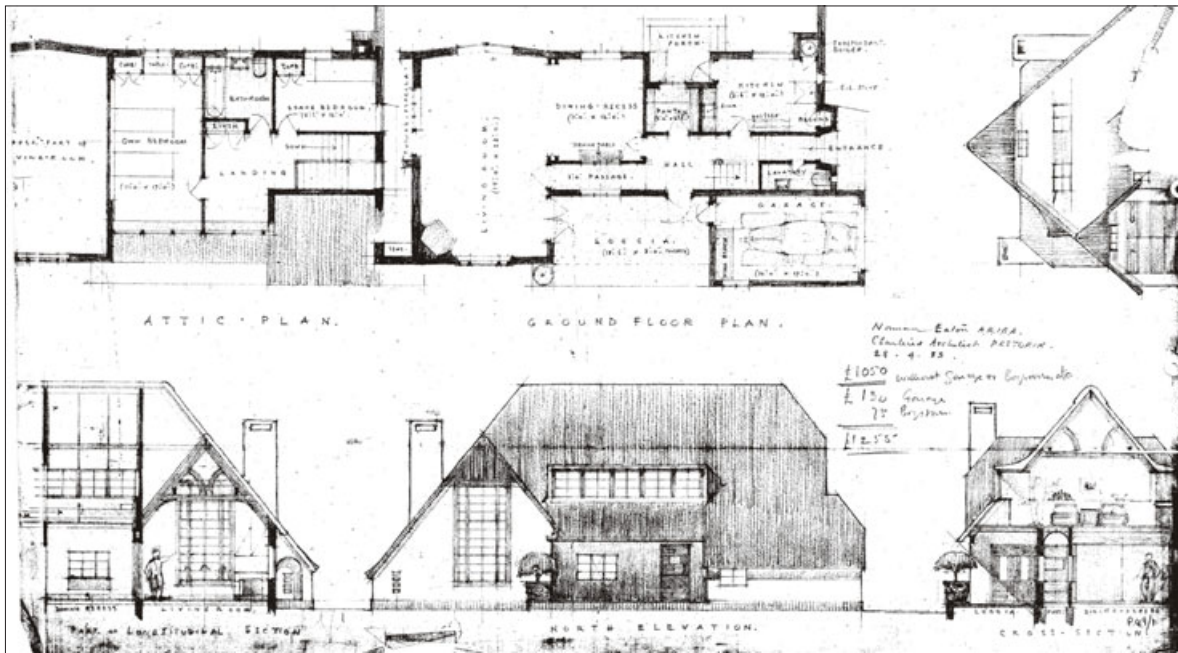


Figure 17 (top): Cottage Moggeridge, Brooklyn, Pretoria (1933). Figure 18 (bottom left): Cottage Boyes (initial proposal), corner of Clark and Pienaar Streets, Brooklyn, Pretoria (1933). Figure 19 (bottom right): Cottage Smook, Sunnyside, Pretoria (1933).

asymmetrically arranged chimney is still prominent as seen in his cottages to date. The conventional bay window has now been replaced by semicircular projections. The semicircles are not toward the back as in the case of Wright's Winslow House (1893), but address the formal street entrance, whilst accentuating the verandah and creating an alcove in the living space. The semicircular extensions placed directly opposite one another remind us more readily of the plan of Villa Schwob (1916) – the harbinger of Le Corbusier's shift to abstraction whilst recapitulating his early years.

Rounded corners were endemic to the early thirties, most notably in the proto-modern work of expressionists such as architect Erich Mendelsohn.

There are various routes of possible derivation of the semicircular projections in the exterior shell of the building. One possibility could be the architecture of H.H. Richardson⁷ who had also been an important source for Wright (Frampton, 1980; 1992:57). Richardson typically captured flowing, volumetric forms within an informal, Romanesque vocabulary. His plans were derived from residential English planning and also French academic planning for public buildings. He explored the interpretation of interior volumes and their expression in the exterior shell of the building (Laseau, Tice, 1992:21–22). Interestingly, Richardson's American Shingle style had a profound influence on the National Romantic manner that emerged in Scandinavia around the turn of the previous century, reaching and influencing someone like Aalto (Frampton, 1980; 1992:192–193).

While the possibility of semicircular expression could be traced *via* Richardson to Wright; the influence most likely derived by means of the so-called 'Glass Chain' (Frampton, 1980; 1992:116): European architectural Expressionism which dominated Europe from 1910 to 1925.⁸

Mendelsohnian expression had influenced, amongst others, Martienssen who had 'raved about' it in 1930 (Chipkin, 1993:135; Cooke, 1988:17). Even Leith's work would attest to the permeation of Mendelsohn's Expressionist architecture with similar curved forms (Chipkin, 2008:56), exemplified in, amongst others, the Nurses' Quarters (*circa* 1934) and his Queen Victoria Maternity Hospital (1943) in Johannesburg. Buildings in Pretoria during the 1930s, such as the Academic Building for the Pretoria Technikon, by Geers + Geers (1937), would also be *huiwerend tussen Modernisme en Art Deco* [undecided between Modernism and *Art Deco*] (Le Roux, Botes, 1991:46), with the same rounded corner balconies and added circular porthole windows.

As mentioned earlier, Eaton had visited several buildings that reflected expressionist ideals while travelling in Europe in 1934 (Postcards and photo albums in the Eaton Collection, UP Repository). Eaton employed similar curved projections for both the alterations to the Barclays Bank (1932) and designs for blocks of flats (1934). House Munro (1932) by McIntosh, in Brooklyn Pretoria, was possibly the first residential project in Pretoria to employ the half-circle to express the staircase in the modern idiom.⁹

It is worth noting that Eaton had already started to use sinuous lines and curves for the interior alterations to the Barclays Bank, East end Branch in Church Street, Pretoria (1932), which had been his first non-residential commission.¹⁰

7 See Appendix B for an introduction to Richardson.

8 See Appendix C. Also see Motif Sheet 2, Chapter 4.

9 See Motif Sheets 1-3, Chapter 4.

10 See Motif Sheet 2, Chapter 4.

1934

Title Dr von Sonn's House

Location Pretoria

TOPi Reference number(s) 07734

Date(s) as per drawing(s) 21.11.34

Keywords Residential, *Afrikaanse woning* [Afrikaans home], Cape Dutch inheritance, exhibition project

Signed Norman Eaton ARIBA Architect

The word 'cottage' or 'homestead' has now been replaced with 'house'.

It is evidently one of several projects dating from 1934 to 1937 that were re-drawn for an exhibition, all enclosed in the same folder as part of a collection¹¹ (Eaton Collection). Clean, black ink on crisp white paper and stencilled *sans serif charette*-like typeface in the *Bauhaus* idiom have replaced Eaton's previous textured drawings and neat handwriting – similar to Martienssen's style

when he took over as co-editor of the SAAR in 1932 (Gerneke in Fisher *et al*, 1998:208–209).

House von Sonn is a simplified, more disciplined replica of Farmstead Hill. Again the front elevation takes on a formal symmetry with an articulated entrance loggia. With nuances of Wright, the language is rooted in the ideas as set forth for the *Afrikaanse woning* (Fisher, Le Roux, 1989). The Cape Dutch inheritance is evident in the H-shaped plan – also the result of the thatch roof, with stoeps to north and south. Low boundary walls hold the outside spaces and become built-in benches, another Cape Dutch trait. Similar to Farmstead Hill, the roof extends beyond the walls to take the usual corridor beyond the envelope of the house, so that certain rooms almost become 'pavilions' under the roof as spatial binding device.

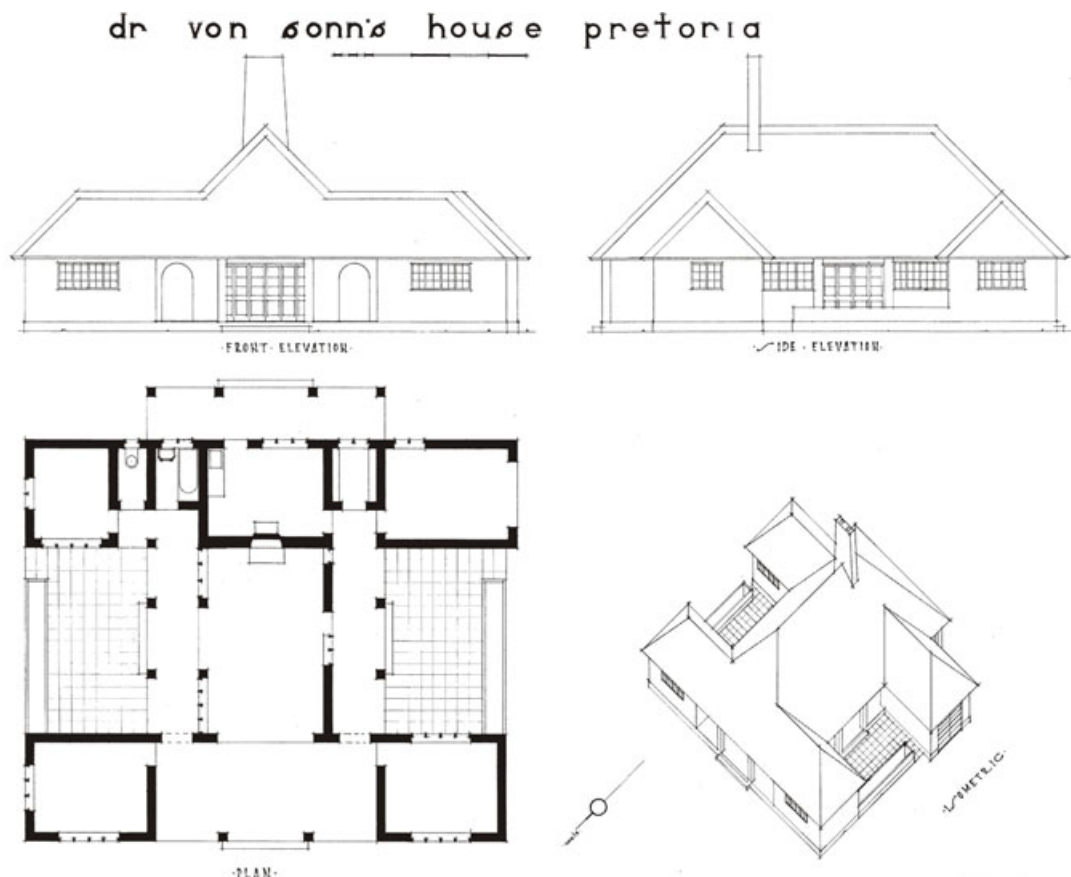


Figure 20: Dr von Sonn's house, Pretoria (1934).

Title Miss Boyes's house*

Location Corner of Clark and Pienaar Streets, Brooklyn, Pretoria

TOPi Reference number(s) 00156

Date(s) as per drawing(s) 1934

Keywords Modern Movement, International Style, Le Corbusier, bagged brick, Kirkness hollow bricks, Expressionism, climatic response, regional, Mendelsohn

Signed Norman Eaton ARIBA Architect

The cottage has been replaced by Eaton's first unrestricted response to the Modern Movement: flat-roofed, simple white cubic masses. Ends give way to cylindrical forms to express fireplace, verandah and entrance porch. Functions are irregularly dispersed along the edges of an informal centrifugal arrangement. Unlike the pure machine-aesthetic of the International Style, brickwork is bagged on the ground level and smoothly finished on the first floor. Exposed bricks form a raised plinth. In addition, simple geometric patterns are recessed into the fireplace front.

The drawing makes specific reference to local Kirkness hollow bricks.¹² Such patterning might have been an Art Deco influence, a movement that picked up themes from various sources – even Egyptian. Eaton had been greatly impressed by Egyptian bas-reliefs upon visiting that country *en route* to South Africa in 1932 (Harrop-Allin, 1975:24). Unlike *Art Deco* beautification, Eaton does not 'apply' such patterned motifs (especially to the exterior of the building); instead the sunken patterns are integrated with the fireplace also to become recesses for book shelves. Deep ledges protect the openings, while level windows and lines in plasterwork enhance the horizontality of the design. The servant's quarters takes a circular rondavel-like shape. The plan is composed as a series of geometries that extend beyond the envelope of the form to become a site-bounding strategy.

Compared to House Munro (1932) by McIntosh,¹³ also in Brooklyn, Pretoria, House Boyes is easily recognized as belonging to Eaton's less dogmatic approach to the Modern Movement. House Munro is plastered and painted in the pure white aesthetic of the Modern, with roof garden,

11 Other projects included in the exhibition were: Houses Nicolson (1934), Gascoyne (1934), Barkham (1935), Frommurze (1935), Viljoen (1934), Rademeyer (1934), Rawlins (1937) and Boyes (1934), and also a block of flats (1934).

For which exhibition had the projects been redrawn? The 'British Empire Exhibition' was hosted from mid-September 1936 to mid-January 1937 in Johannesburg (Chipkin, 1993:105–109). However, the last project that Eaton had redrawn as part of the exhibition collection was House Rawlins, which was only designed in March 1937 (Eaton Collection, UP Repository). Another possibility is that the drawings were done for the annual exhibition at the Department of Architecture, Wits. At their annual September 1935 exhibition and prize-giving, work by past students of the institution had been included in the exhibition. It was decided to adopt the same procedure from then onwards (Anon, SAAR, Sept 1935: 280). All students used the same method of presentation (a clear departure from the classical watercolour renderings that Eaton had done as a student): black ink on white paper, with *charrette*-like font for annotations. Since the last project included in the redrawn collection from Eaton's young *oeuvre* dates from 1937, the assumption is made that the exhibition for which these projects were redrawn, was hosted in that year. If not for his *alma mater*, it could possibly have been for an exhibition hosted in response to the 'fake modernistic pavilions' (Chipkin, 2008:83) of the preceding 1936 Empire Exhibition.

Nonetheless, it is interesting that he included this particular project amongst all his soon-to-follow more modern endeavours as part of the exhibition, especially because it does not hail the new architectural idiom, but on the contrary, displays all the traits that Eaton had followed to date.

12 J.J. Kirkness, a Scottish immigrant contractor, whose brickworks was set up in Pretoria became the major supplier of the material in Southern Africa at the end of the 19th century. Buildings from as far and wide as the Groote Schuur Hospital in Cape Town to the post office building in Harare were built with Kirkness bricks (Fisher, 1998:129).

13 See Motif Sheet 3, Chapter 4.

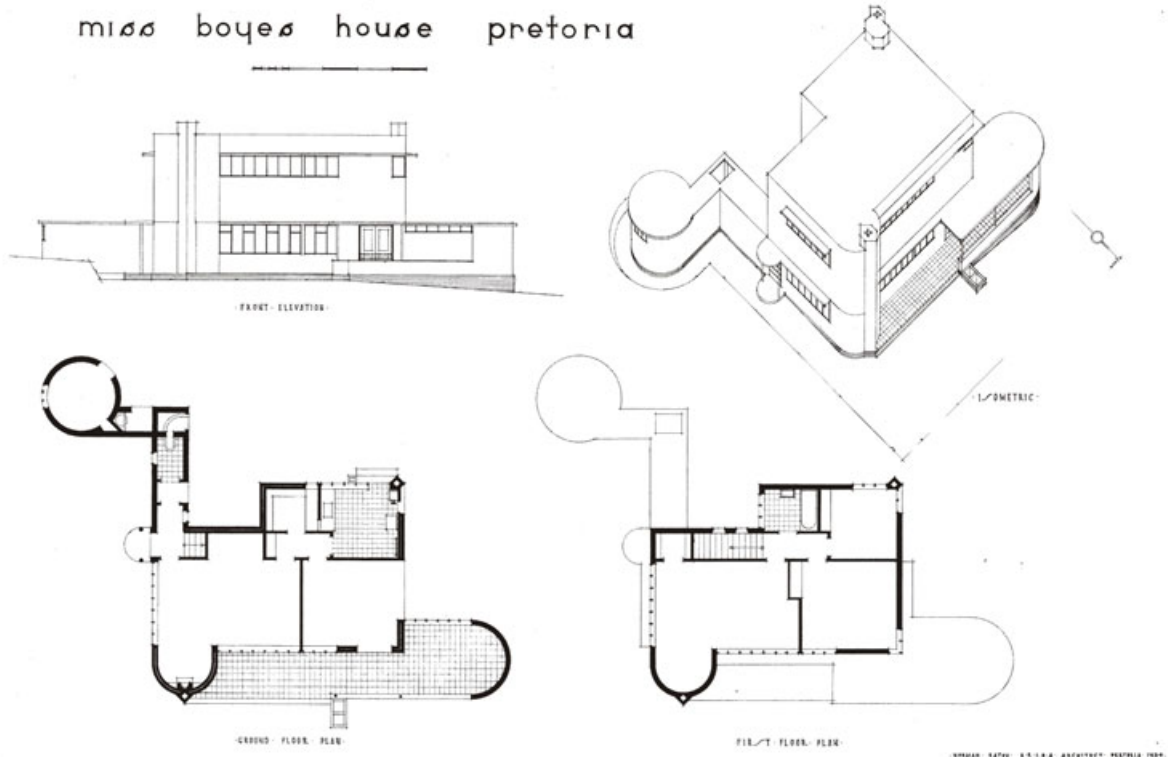
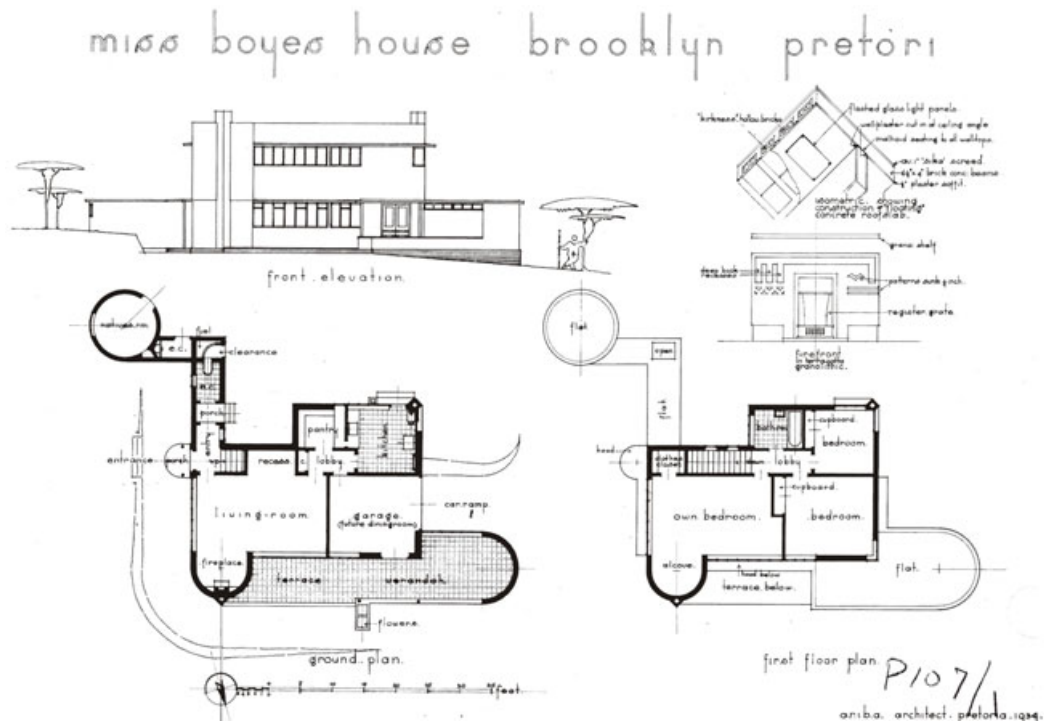


Figure 21 (top): Original sketch design of **House Boyes**, corner of Clark and Pienaar Streets, Brooklyn, Pretoria (1934). **Figure 22 (bottom):** The redrawn **House Boyes** (1934) for the exhibition collection (see House von Sonn) without textures, reference to local building materials, human figure and trees.

strip windows, and a clean aesthetic. Detailing that purist McIntosh used that surprisingly alludes to the Art Deco,¹⁴ was for the articulation of rain water outlets on facades. Although McIntosh hints at the local climate with a stoep along the north eastern corner, windows are not protected with projecting ledges as in House Boyes. The same humane scale is also not achieved at the Munro House, despite horizontal emphasis, perhaps due to the lack of surface texture. While Eaton uses a traditional form to define the servants' quarters, McIntosh employs rectilinear form. In the Boyes house, the expressionist curves could again be Mendelsohnian as passed down *via* Leith and Martienssen (Chipkin, 1993:135).

Formal approach was doubtless informed by the *esprit de système*: Le Corbusier's use of metaphor for the machine age comes to mind, such as the ship and automobile, which is expressed as elements that do not blend with the whole. Elements that stand out separate Le Corbusier¹⁵ from the International Style. Eaton's work clearly foreshadowed a less doctrinaire approach to both.

The Boyes House still exists today, but has been altered from the original.

Title House Kleyn

Location Corner of Edward Street and Premier Avenue, Waterkloof, Pretoria

TOPi Reference number(s) 07734

Date(s) as per drawing(s) '19.7.34.'

Keywords Modern Movement, van der Rohe, Wright, Neutra, horizontality, expressive Mendelsohnian curves

Signed Norman Eaton ARIBA Architect

To be built opposite the 1928 Gordon Leith designed House Curlewis (1927) in Waterkloof, Pretoria, the design for House Kleyn was by contrast a thoroughly modern, long, narrow house. It was oriented east-west with the main living space opening to a northern verandah – again

ideal for the climate. The plan is composed as a series of geometries that extend beyond the envelope of the form where cylindrical forms express stairs and balconies. Similar to the Tugendhat House (1930), Brno by Van der Rohe; and the layered, compartmentalized planning of Wright's Robie House (1909), the service block slides behind the main living volume. The free plan is reserved solely for the living volume.¹⁶

Similar to the design device used by Eaton for House Kleyn, Wright also offset axes in the form of semicircle enclosures of entry porch and, in the case of, for example the Blossom House (1892), a semicircular conservatory to the rear (Laseau, Tice, 1992:86).

The formal composition precludes the Nicolson and Borckenhagen Houses, where served spaces make up a 'head' while the servant spaces constitute the 'tail' with binding walls. Horizontal lines are emphasized with strip windows and overhangs. Again, Eaton humanizes scale and presentation with the inclusion of a human figure and landscaping as part of the drawing. The outline of trees alludes to local vegetation, contextualizing his design. A rounded

14 A distinction needs to be made between 'Streamline Moderne' and the term 'Modern'. 'Streamline Moderne' refers to a late branch of the *Art Deco* that was considered to be 'Modernistic' (pejoratively used by purists whose work was 'Modern'). Although both 'Modern' and 'Modernistic' are superficially defined by curving forms, long horizontal lines, and the *Art Deco* often by nautical elements (such as railings and porthole windows); the true Modern purist does not 'apply' these elements as mere aesthetic devices (Chipkin, 2008:71, 95). McIntosh was one of the 'group of young Turks and militant Moderns' at the University of the Witwatersrand. He was one of the so-called 'Transvaal Group' who advocated the Modern Movement in architecture (Fisher, 1997:76).

15 See Chapter 2, 2.1.2, 'Eaton and the first wave of the Modern Movement in South Africa', with particular reference to the description of the design primer as advocated by Martienssen.

16 See Motif Sheet 4, Chapter 4.

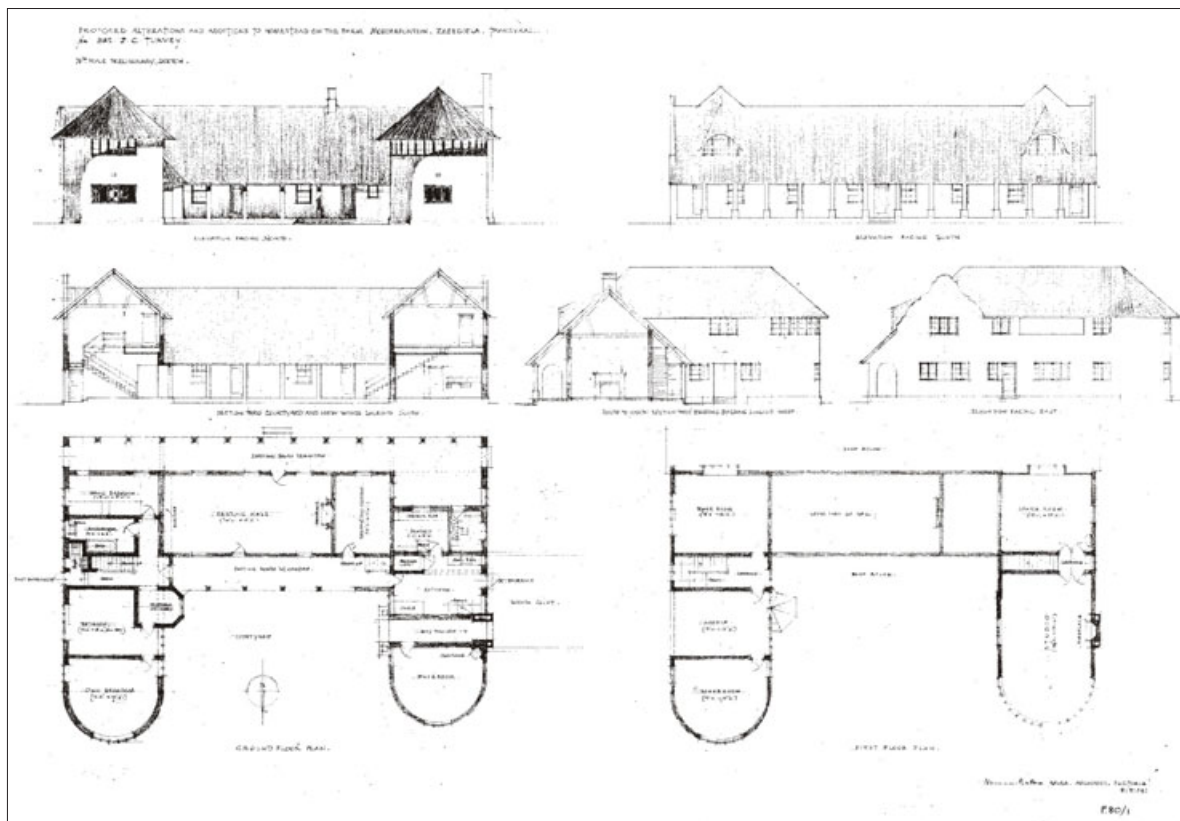
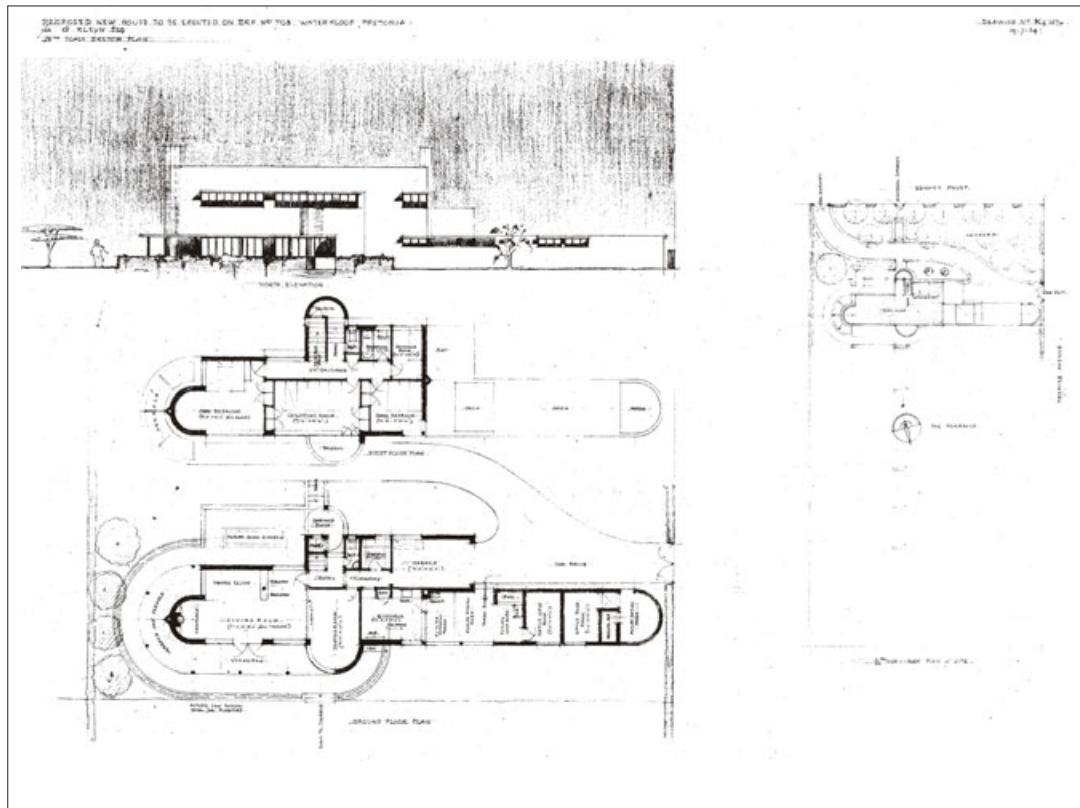


Figure 23 (top): House Kleyn, corner of Edward Street and Premier Avenue, Waterkloof, Pretoria (1934). Figure 24 (bottom): Additions and Alterations to existing House Turvey, Modderfontein, Zebediela, Transvaal (1934).

pergola follows the curved edges of the house, continued in the echoed, curved low walls with plantings that contain outside spaces.

While prevalent to the thirties, the rounded, sinuous forms in this case remind us particularly of the ‘Skyline Apartments’ Penthouse, Westways, 1934 by Richard Neutra.¹⁷ Interestingly, Neutra had worked for Mendelsohn, the main instigator of expressionist curves as disseminated in South Africa *via* Martienssen (Whittick in Hatje, 1971:214).

Form-giving bears an even more compelling resemblance to the ‘moat’ of the later Von Sternberg House (1935–1936), California, also by Neutra.¹⁸ The latter can be considered as a precursor to Neutra’s later Kaufmann Desert House (1946–1947), Palm Springs, California.

Title Proposed Additions and Alterations to Homestead on the farm Modderfontein, Zebediela, Transvaal for Mrs. J.C. Turvey
Location On the farm Modderfontein, Zebediela, Transvaal (present-day Limpopo)
TOPi Reference number(s) 07739
Date(s) as per drawing(s) ‘8.8.34.’

Keywords Farmstead, alterations, additions, *rondawel-huis* [rondavel house], Moerdyk
Signed Norman Eaton ARIBA Architect

Additions and alterations to a farmhouse on the farm Modderfontein, Zebediela, for Mrs Turvey remind one on the one hand of the work of Moerdyk, but on the other Eaton employs the ubiquitous semicircle to do the extensions to the existing structure in order to create a courtyard. He also employs a horizontal strip window directly under the roof overhang to create a shadow line.

Together with the thatched roof, the use of the semicircles recalls the traditional rondavel, as advocated by Moerdyk in his encouragement for rondavel houses in *Die Boerevrou* (Fisher, Le

Roux, 1989:9–15). The rondavel typology seems to be reserved for farmsteads, while Eaton works in the modern idiom in the suburbs.

Title House at Nigel Tvl. (sic)
Location Nigel, Transvaal (present-day Gauteng)
TOPi Reference number(s) 07736
Date(s) as per drawing(s) First design proposal dated ‘6.9.34.’

Keywords Housing prototype, Modern Movement, Wright, Expressionism
Signed Norman Eaton ARIBA Chartered Architect

Eaton started the proposal for the housing prototype with a combination of both romantic and modern influences: a tower-like structure with vertical openings attach the stairs to a flat-roofed, simple prism with a triangulated living space. The tower reminds us of H. H. Richardson’s articulation of staircases at the Sever and Austin Halls at Harvard University, Cambridge, Massachusetts (1880s), while the compartmentalized plan recalls Arts and Crafts planning. Design exploration sketches demonstrate the development of a less centralized, compact design towards a more centrifugal and elongated plan, initially hailing the same semicircular definition of spaces as one might have found in Le Corbusier’s Villa Schwob (1916).

In the final design, the garage extends beyond the envelope of the house, resulting in an L-shaped plan and pronounced entrance. A small chevron pattern along the southern binding wall reminds one of the Arts and Crafts, while curving forms, nautical elements and horizontal lines, affirm the ‘Streamline *Moderne*’.

Served and servant spaces are separated to one side of the house, again expressed as ‘head’ and ‘tail’. Living spaces are more compact, ex-

¹⁷ For an introduction to Neutra, see Appendix B.

¹⁸ See Motif Sheet 4, Chapter 4.

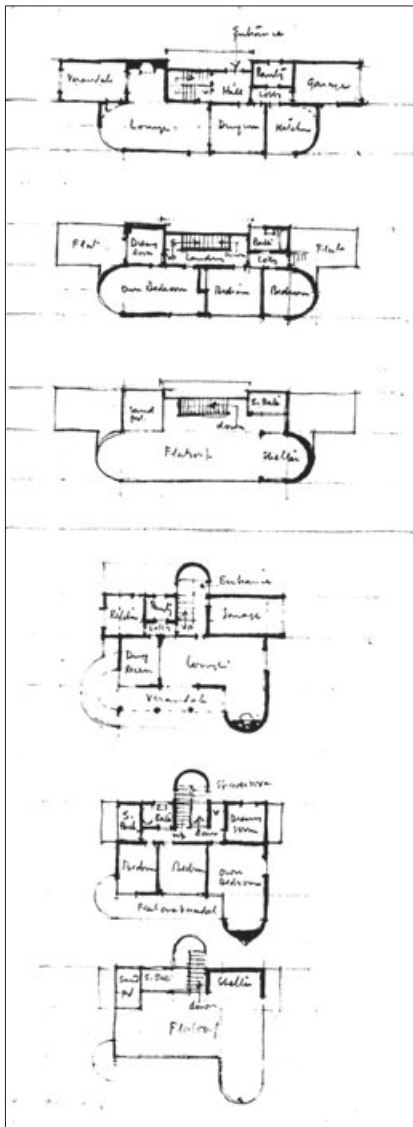
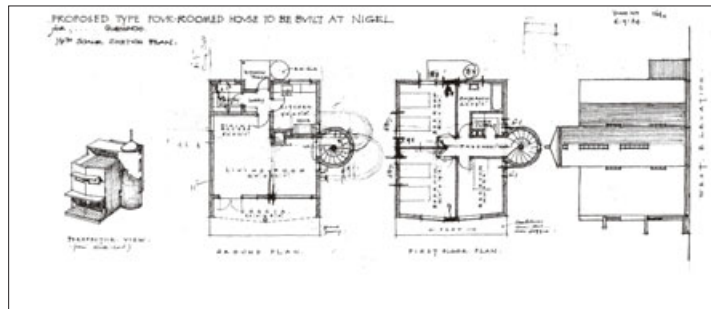


Figure 25 (top): Design development of the **Nigel houses** from centralized plans recalling Villa Schwob (1916) in plan, to centrifugal arrangements.



(right, from top to bottom)
Figure 26: Original centralized proposal for the **Nigel Housing prototype** dated: 6.9.34.

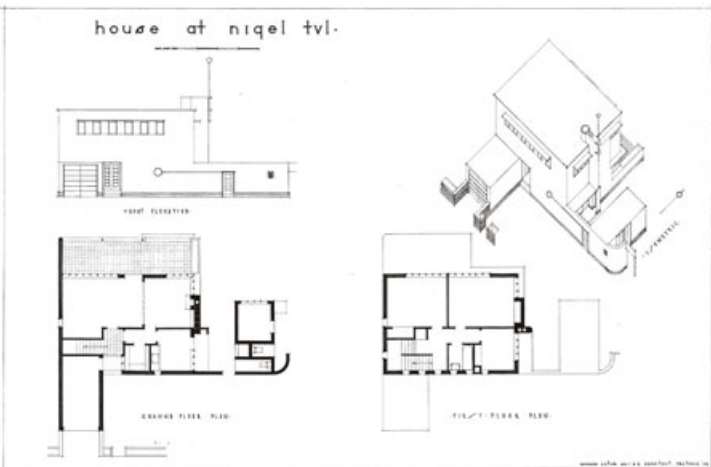


Figure 27: Design development of the **Nigel housing prototype** (1934).

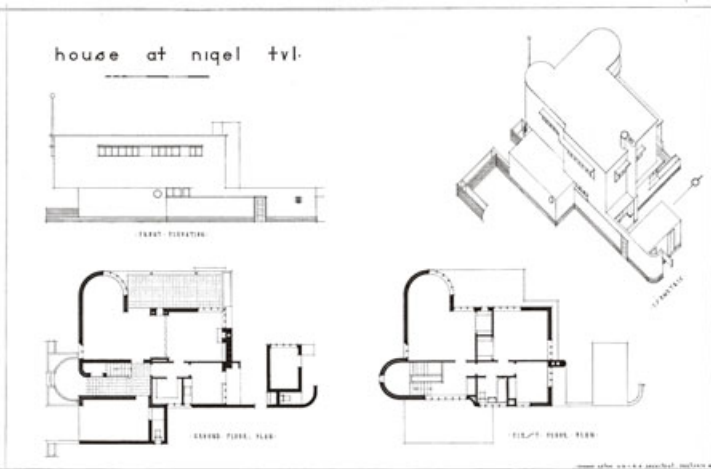


Figure 28: Final proposal for the **Nigel Housing project** (1934), part of the redrawn projects of the 1937 exhibition.

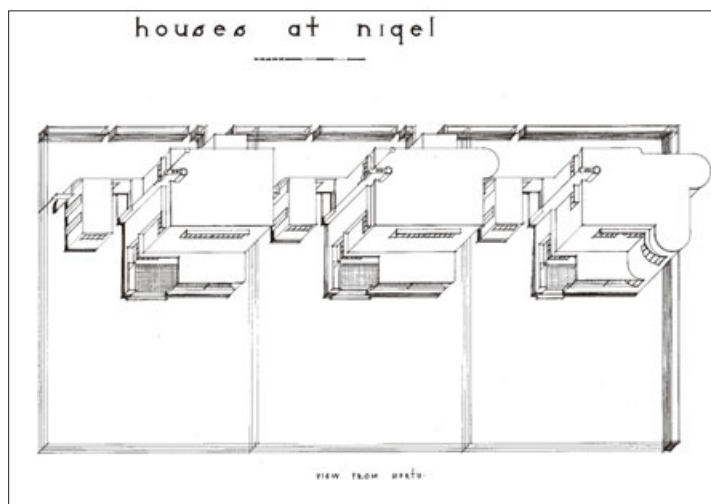


Figure 29: Final proposal for the **Nigel housing prototype**, part of the 1937-exhibition drawings (1934).

pressed in the L-shaped plan (that he uses for the first time), while service spaces create the asymmetrical terminal projections, with a low binding wall. Similar to Houses Boyes and Kleyn, Eaton therefore applied a basic Wrightian strategy to create a dynamic, but balanced plan organization: an asymmetry is created that is stabilized by the hierarchical arrangement of the overall composition.

The departure from the initial centralized design to the ultimate centrifugal approach, displays an interesting, albeit unrelated, resemblance to the comparison that Colin Rowe (1920–1999) had made between Palladio's Villa Malcontenta (c.1560) and Le Corbusier's Villa de Monzie (1927) at Garches, France. Kenneth Frampton (b. 1930) quoted from Rowe's 1947 essay:

At Garches the central focus has been consistently broken up, concentration at one point is disintegrated, and replaced by a peripheral dispersion of incident. The dismembered fragments of the central focus become, in fact, a sort of serial installation of interest round the extremities of the plan (Frampton, 1980; 1992:158).

Frampton maintains that 'Garches was significant for its resolution of a problem ... how to combine the comfort and informality of the Arts and Crafts plan with the asperities of geometrical ... form' (Frampton, 1980; 1992:158).

Frampton refers to the reconciliation of the private realm of modern convenience with the public facade of architectural order, as Le Corbusier's 'Four Compositions' of 1929 would indicate through the displacements afforded by the free plan. Although Eaton does not employ the planning grid, free-standing columns and *plan libre* (nor does he reinterpret a historical masterpiece); his first, centralized Arts and Crafts-like scheme for the housing prototype has been dis-

persed into a centrifugal, modern composition.

Eaton has started his design journey also to combine the 'comfort and informality of the Arts and Crafts plan' with the formal geometries of Modern Architecture. While he would ultimately amalgamate 'National Romanticism' with the Modern, he would, however, always learn more from Wright than Le Corbusier. Where Wright initially made the house a compact block (e.g. Winslow House, 1893), he ultimately made the simplicity of a single mass give way to 'break' enclosed and separated spaces in his so-called 'organic architecture'.

Contradictory to the above analysis, Eaton would employ a device similar to House Rade-meyer (1935) for the final design of the un-built housing project – but only the compact L-shaped 'head' of the design.

Title 'Sunways' for Mr Gascoin(e) or Gascoyne (spelling differs on various drawings)

Location Erf 207/8, off Ridge Road, Muckleneuk, Pretoria

TOPi Reference number(s) 07578

Date(s) as per drawing(s) '22.9.34.'

Keywords Residential, Modern Movement, Wright, Expressionism, 'Streamline *Moderne*'

Signed Norman Eaton ARIBA Architect

The flat-roofed design is very different from the initial proposal, which had been a simple cubic box with a pitched roof and deep overhangs on the northern facade. The house is set back from the street and steps with landscaped terraces. Simple, white cubic masses seem to grow from the site – contra Le Corbusier's early work as propagated by the Transvaal Group. The plan is again a careful composition with stairs, kitchen and bay window expressed in semicircular forms that project beyond the envelope. The semicircles seem to have been mirrored along an axis that separates served and servant spaces on the

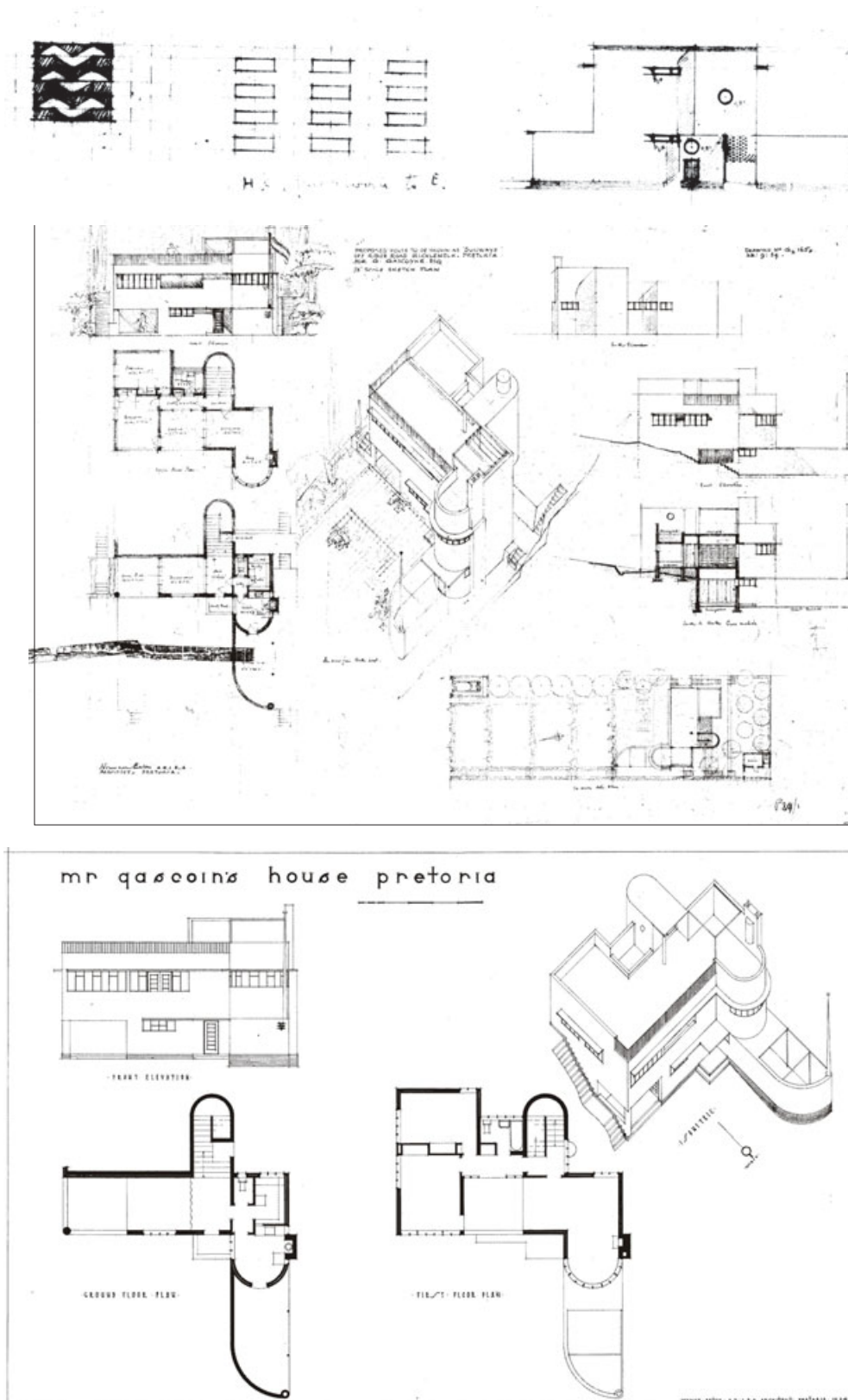


Figure 30 (top): Design development sketch, showing chevron patterning and recesses in brickwork, **House Gascoine** (1934). **Figure 31 (middle):** The original version of **House Gascoyne**, to be known as 'Sunways' off Ridge Road, Muckleneuk, Pretoria (1934). **Figure 32 (bottom):** The redrawn version of **House Gascoine**, Pretoria (1934).

lower plan (Wright's 1892 Blossom House comes to mind). A kitchen yard defined by circular screen wall becomes part of the extended composition of plan to site. Horizontal field, extending from the lower porch to the swimming pool and beyond, is defined with a grid of tiles. The extended curved wall binds the house to the site, terminated with a flagpole, which together with the porthole windows, recall the 'Streamline *Moderne*' influence. Eaton's usual planning is altered as a result of the compact and stepping site, so that, similar to Wright's planning, the living room is on the first floor, with a loggia to separate it from the bedrooms on that level. All windows are protected by projecting ledges.

Note the human figures in drawings, as well as attention to landscaping and indigenous trees, which have all been removed for the purer version to be included in the exhibition. See also detail drawings of brick textures recalling Art Deco motives.

Title House Nicolson*

Location Erf 609, Olivier Street, Brooklyn, Pretoria

TOPi Reference number(s) 00336

Date(s) as per drawing(s) '24.9.34.'

Keywords Residential, Modern Movement, Regionalism, Pretoria Regionalism, chevron patterning, Streamline *Moderne*

Signed Norman Eaton ARIBA Architect

Response to climate played a major role in the establishment of Pretoria Regionalism:

Another consequence of climatic concerns was a move away from street-directed designs to a climatically favourable site orientation relative to the north with less regard to the street image (Fisher *et al*, 1998:136).

According to Harrop-Allin, House Nicolson was

one of the first in Pretoria to turn its back upon the street (1975:29) to accommodate the climate. According to the records in the Eaton Repository, Eaton had in fact already done this in the designs for Houses Kleyn and Gascoyne. Besides considering orientation, the attenuated masses of both Houses Kleyn and Nicolson allow for appropriate cross-ventilation. Cylindrical forms provide the structure with plasticity, resulting in an elongated L-shaped version of the Nigel Housing proposal. Similar to House Kleyn, served spaces make up a 'head' while the servant spaces constitute a 'tail'. A covered stoep, another distinguishing feature of Pretoria Regionalism (Fisher *et al*, 1998:136) and yard are contained within the composition and afford connectedness to the outside. One narrow curved end of the composition terminates in a pavilion-like cantilever, counterbalanced by the servant's yard directly opposite.

Another true hybrid of the *esprit de système*, the composition of House Nicolson is similar to the organizational devices employed by Frank Lloyd Wright, amongst others, in the 1940 Lloyd Lewis House, Liberville, Illinois, USA (Laseau, Tice, 1992:108). All parts of the Nicolson House are linked both vertically and horizontally in composition (if not spatially), even if there is a clear distinction in the zoning of the house. By contrast, Eaton's purist contemporaries often rather articulated functional zones as complimentary formal compositions.¹⁹ In a comparison between Houses Stern and McLea (both early 1930s), Johannesburg, for example, both by Martiensen, Fassler and Cooke, Jonas notes:

[The]...application of the principle of separate expression to separate functions [which

¹⁹ See Chapter 2, 2.1.2 'Eaton and the first wave of the Modern Movement in South Africa' with specific reference to Bernard Cooke's explanation of the Transvaal Group primer for design.

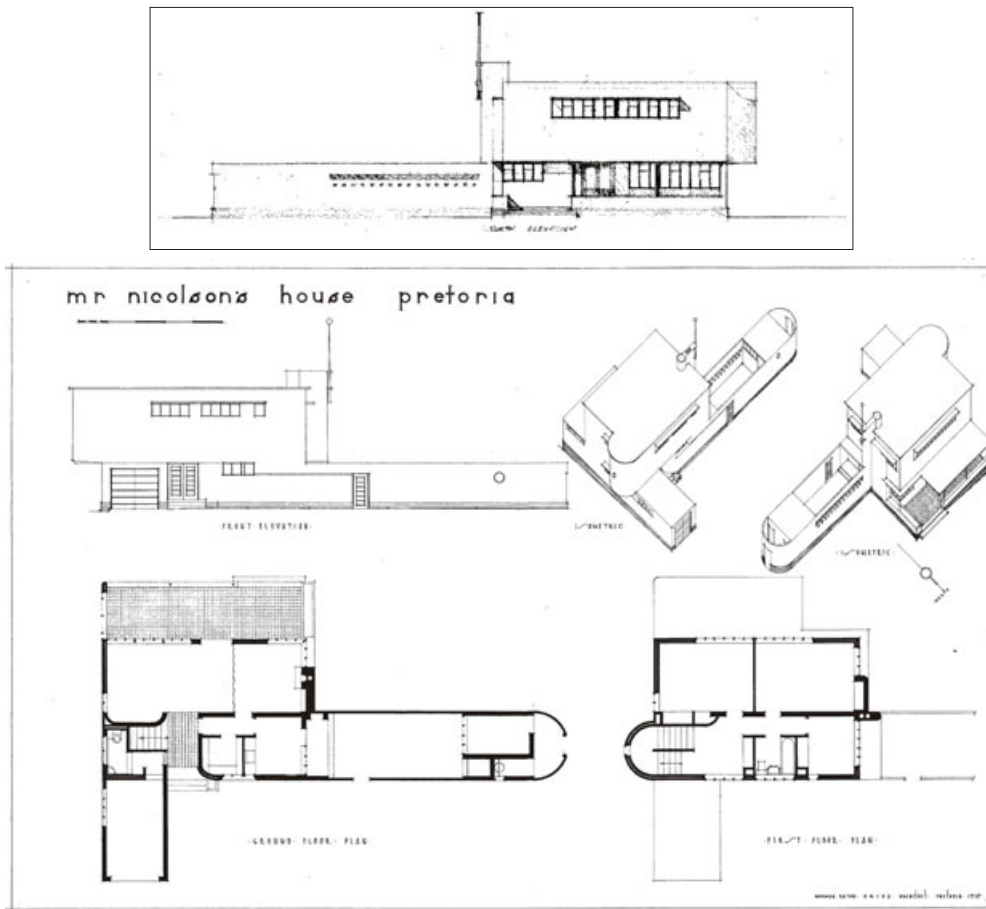
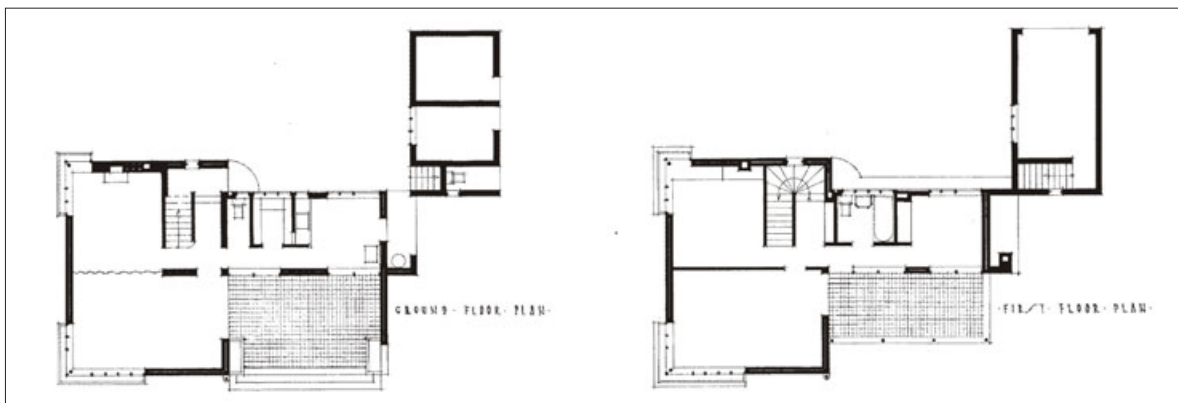
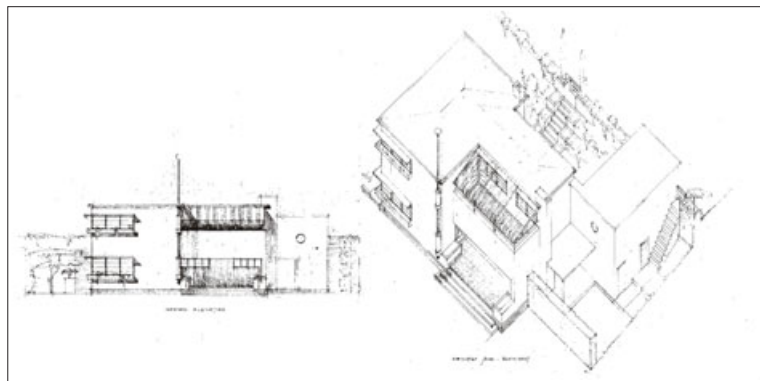


Figure 33 (top): House Nicolson,* Brooklyn, Pretoria (1934). Although the house was un-plastered, the drawings show a smooth, plastered finish. **Figure 34 (above): Redrawn House Nicolson,** Erf 609, Brooklyn, Pretoria (1934). **Figure 35 (right): House Viljoen,** Berea Street, Muckleneuk, Pretoria (1934), showing the second series of sketch designs. **Figure 36: House Viljoen (below, detail),** Berea Street, Muckleneuk, Pretoria (1934), redrawn for the exhibition.



allows] no overlapping in either the horizontal or the vertical plane [that makes House McLea in particular] markedly successful (Jonas, 1937:101–103).

Characteristic of Eaton, House Nicolson was to be his first completely un-plastered red-brown brick structure. The structure has been altered significantly through the years and has since as a result been plastered and painted.

Similar to the fireplace details in House Boyes, bricks laid in a chevron pattern in one of the walls again precede his later interpretations of brick 'weaving' and allusion to African patterns. Eaton was also amidst the genealogy of personalities who were moving towards a so-called 'Afrikaner-African idiom' (Fisher, 1997:70; 1993:132). His work therefore resonated with that of Moerdyk²⁰ whose application of the African motif has many precedents. A case in point being the horizontal relief stripwork of chevron patterning on the facades of the Merensky Library (1933–1936) (Fisher in Vladislavic, Judin, 1998:222–226).

Title House Viljoen

Location Erf 303, Berea Street, Muckleneuk, Pretoria

TOPi Reference number(s) 07734

Date(s) as per drawing(s) 10.10.34, 17.11.34, 7.3.36, 30.6.36

Keywords: Residential, Modern Movement, Regionalism, low-pitched roof, 'Streamline *Moderne*'

Signed: Norman Eaton ARIBA Architect

Only a small box-like portion of the house is visible from the street. The rest of the house opens up toward north and steps with the contours of the site. Because of the bad weathering of flat roof construction (Fisher *et al*, 1998:124; Cooke, 1993:23), a low-pitched roof is almost apologetically introduced for the first time to cubic masses

(the initial proposal had been for a flat roof). Although there are no overhangs, Eaton still uses projecting ledges to protect openings. The design is a simple cubic mass without cylindrical forms: an irregular plan, and once again living spaces open to the north with a covered entrance and Wrightian corner windows and planter boxes. Nautical elements such as porthole windows and masts are still present, *aka* 'Streamline *Moderne*'.

The initial design dated '10.10.34' differs substantially in zoning from the one dated '17.11.34'. After the initial sketch plans, two alternate sets of working drawings follow: On 7 March 1936, it is a conservative pitched roof design. And then, a drawing dated 30 June 1936, shows the flat roof yet again!

1935

Title Proposed new houses for R. Tosi and alteration to existing house*

Location Corner of Luttig and Rebecca Streets, Westend, Pretoria

TOPi Reference number(s) 07516

Date(s) as per drawing(s) '21.2.1935.'

Keywords Residential, conventional house

Signed Norman Eaton ARIBA Chartered Architect

Three new houses, in the same language as the existing dwelling, were proposed for R. Tosi, presumably the same client for whom Eaton did a much more radical design in 1938. The houses are all simple, conventional imitations of another on adjacent sites. Pitched roofs with deep overhangs, standard windows, and parsimonious use of materials characterize the houses. Planning was also compact, with living and dining rooms facing north onto a covered verandah. Eaton uses differentiation in brick work to make the

²⁰ Refer to Motif Sheets 5 and 8, Chapter 4 for a visual distillation.

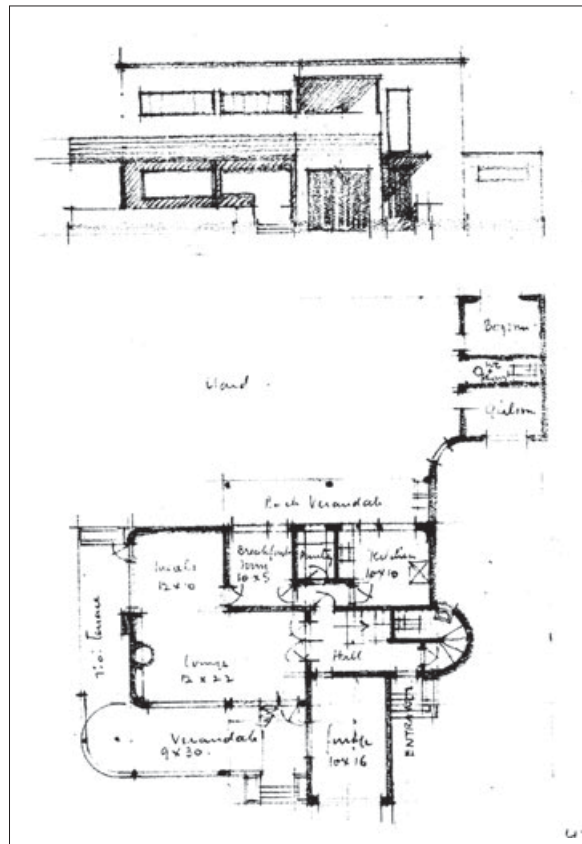
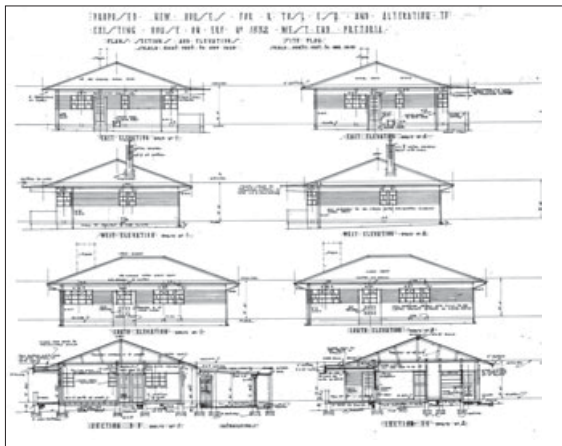


Figure 37: A thumbnail extract from the original drawing, showing the character of the new houses adjacent to the existing house for **R. Tosi**, Westend, Pretoria (1935).

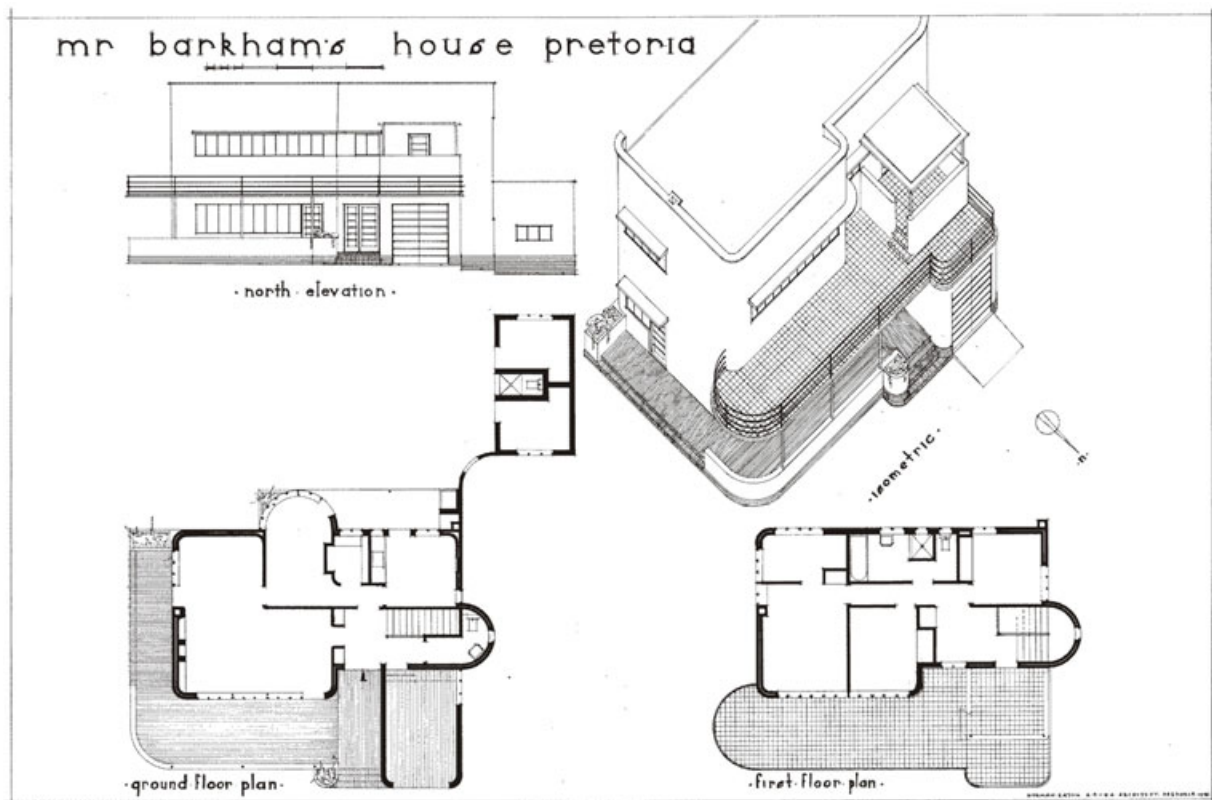


Figure 38 (top right and above): House Barkham, Troye Street, Muckleneuk, Pretoria (1935): The bottom drawing was included for the 1937-exhibition.

simple design special: facebrick plinths are offset with recessed facebrick courses that align horizontally with windows and bagged brick is applied selectively. The houses have been altered significantly over the years.

Title Mr Barkham's House

Location Troye Street, Muckleneuk, Pretoria

TOPi Reference number(s) 07527

Date(s) as per drawing(s) 1935

Keywords Residential, Modern Movement, Expressionism, Wright, Neutra

Signed Norman Eaton ARIBA Architect

House Barkham is one of the last flat-roofed houses produced by Eaton during the 1930s. Where zoning and organization of the plan is similar to House Viljoen (and indeed, his housing scheme for Nigel), here half-circles again express stairs and balconies. Now otherwise 90° angles of square-shaped spaces give way to curves, rendering an overall expressive plasticity to the form. While the Mendelsohnian semi-circle is ever-present, the corner articulation recalls the Kun House, Hollywood Hills, USA by Neutra (previous employee of Mendelsohn), completed in the following year (1936).

In Eaton's house, an unusual exception is made of the servant's quarters that contrast the main house with the only rectangular form. Covered northern stoeps wrap around the rounded corners of the house. Again an exposed brick plinth (for waterproofing purposes) makes the house seem to grow from the earth. Notably, there are no references whatsoever to the 'Streamline Moderne'.

Title House Frommurze/ Frommurzse/ Mackenzie House*

Location 188 Mackenzie Street, Brooklyn, Pretoria

TOPi Reference number(s) 00633, 07735 and 00024

Date(s) as per drawing(s) '30.4.35'

Keywords Residential, Modern Movement, Expressionism, Wright, regional influences

Signed Norman Eaton ARIBA Architect

Similar to his previous Brooklyn houses, box-like forms step back to allow for terraces, a verandah and sun terrace to the north east of the house. Typical of the 'machine for living', a circular form articulates vertical circulation²¹ – one of the last of Eaton's houses to employ the semi-circle to express function externally. Eaton departs more visibly from the flat roofs of the modern movement with a low-pitched roof, as previously seen in the design for House Viljoen (1934). The exterior brickwork is bagged with plaster and paint.

Similar to Houses Gascoyne and Barkham, a wall acts as datum, holding the composition together. The binding wall also becomes a site anchoring device, extending into the site. Internally, it acts as divider of servant and served spaces. Instead of being a simple double storey, Eaton adds complexity to the section by aligning the height of the eastern upper terrace and western stair landing, so that the lounge is protected by a lower canopy and ceiling height, creating a feeling of intimacy. In addition, he skilfully uses *pilotis* to free up the plan and dissolve the corridor. Living, dining and outside terrace are thus seamlessly interconnected.

Again (as we saw the earliest allusion to this in House Kleyn), similar to the Tugendhat House (1930), Brno by Van der Rohe; and the layered,

²¹ See Motif Sheet 4, Chapter 4.

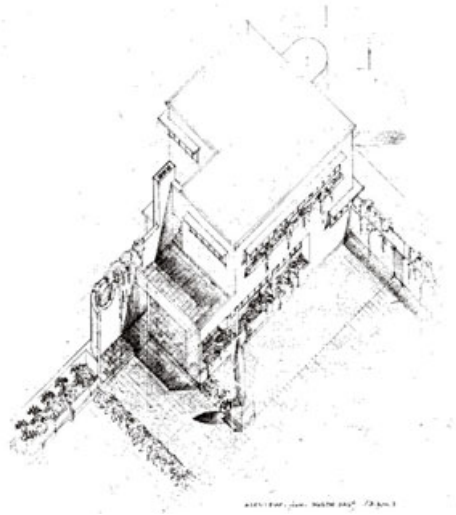


Figure 39: House Frommurze/Frommurze/Mackenzie, Brooklyn, Pretoria (1935): Note the 'disappearance' of the corridor on ground level, and the application of plants to all horizontal ledges. The drawing below is again a 'cleaner' redrawn version for the 1937 exhibition.

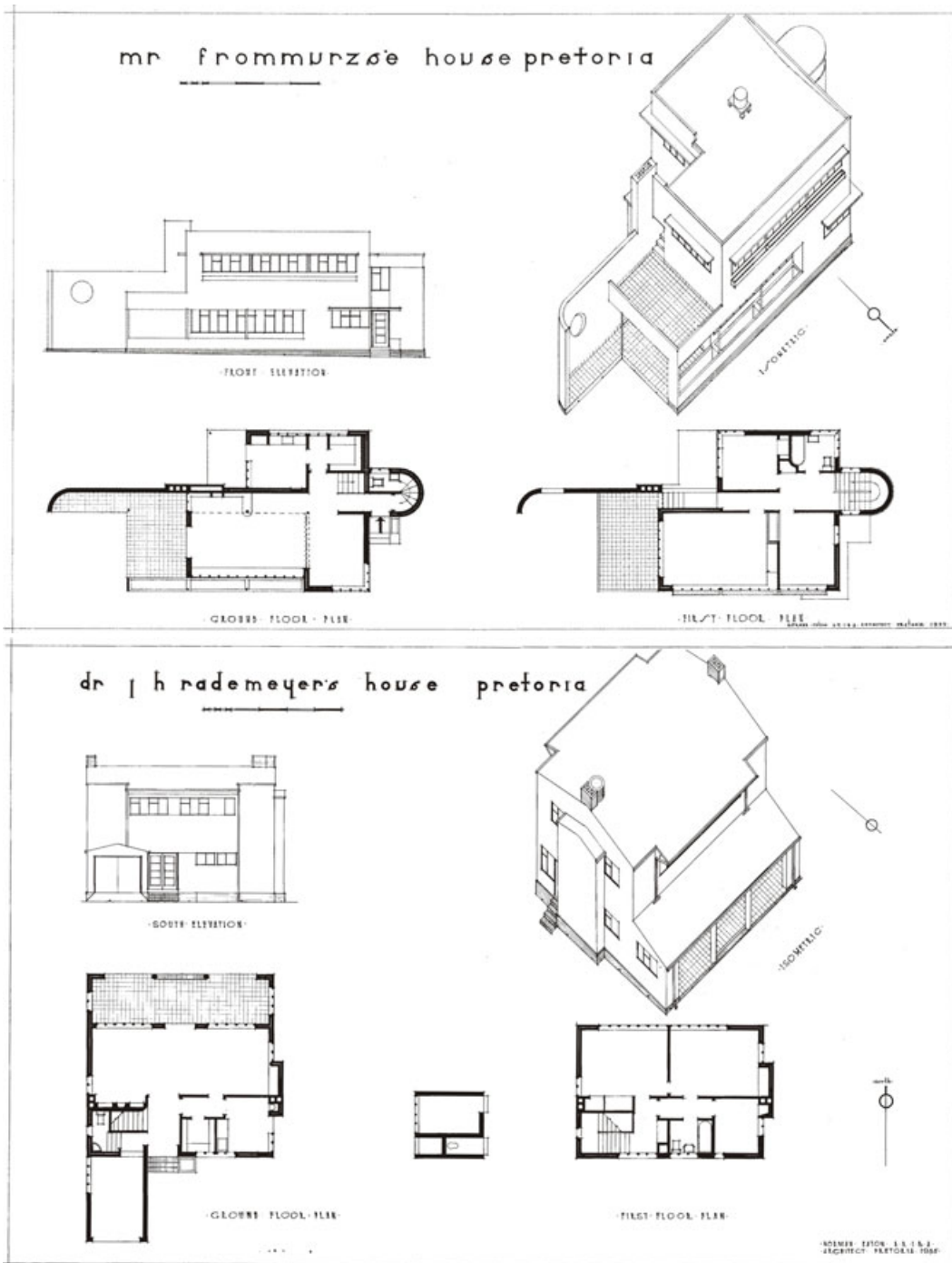


Figure 40: House Rademeyer*, Erf 527, Nicolson Street, Brooklyn, Pretoria (1935).

compartmentalized planning of Wright's Robie House (1909), the service block slides behind the main living volume and the free plan is reserved solely for the living volume.

Further reminiscent of Wright's schemes, plants are integrated along all space-containing horizontal ledges with flower boxes, similar to House Viljoen.

With House Frommurze, we see the opening of the plan and an extended wall as site binding device in Eaton's work. It would only be later that the stronger emphasis would be on horizontality similar to both Wright and Van der Rohe – as opposed to the verticality still present in House Frommurze.

The house would later on be referred to as the 'Mackenzie house' (from the street name). It has been altered significantly from its original state.

Title House Rademeyer*

Location Erf 527, Nicolson Street, Brooklyn, Pretoria

TOPi Reference number(s) 07571

Date(s) as per drawing(s) '1.8.35'

Keywords Residential, Modern Movement, regional influences

Signed Norman Eaton ARIBA Architect

The Nigel Housing prototype is replicated and reduced to an unpretentious, rational L-plan, prism structure with a pitched roof: The symmetrical northern facade addresses the garden and gives way to irregular form to the southern street facade. A deep verandah to the north responds to the Pretoria climate while taking up the whole of the northern facade.

The house is very compact, *sans* the binding wall elements and site-binding extension to outside space. Eaton uses thickly whitewashed stock-bricks and a low-pitched roof with flat gabled ends – very different from the forms and a-textural approach of the International Style.

While the plinth is exposed brick, facebrick is also used to define thresholds and stairs (brick-on-edge) and chimneys. The house was included in the AR article on 'Modern Architecture in South Africa', by Sir Hugh Casson (Aug, 1940:42) and was described as a

compact little house ... The projection of eaves only where windows occur is an interesting feature, and the repetition of the shallow curve of the roof on the projecting chimney stack gives a pleasant rhythm to the design.

Harrop-Allin (1975:29) maintained that the Rademeyer House demonstrated

a far cry, now, from the severe geometric forms and slick 'machine-made' finishes – characteristics typical of the International Style. Eaton's growing stress on the personal and the regional stood in fundamental opposition to the deliberate universality of that style.

Title House Cordélie* for Mr Stoker

Location John Street, Erf 351, Muckleneuk, Pretoria

TOPi Reference number(s) 07580

Date(s) as per drawing(s) '6.9.35', '16.9.35'

Keywords Residential, Modern Movement, regional influences

Signed Norman Eaton ARIBA Chartered Architect

House Cordélie is a small, compact, flat-roofed house that bears some resemblance to House Smit (1936). Stairs are expressed in a projecting half-circle, and functions are arranged tightly in an L-shaped configuration. While the house turns its back to west, the facade steps along the east and north, and a verandah wraps around the north eastern corner. The garage and servant's

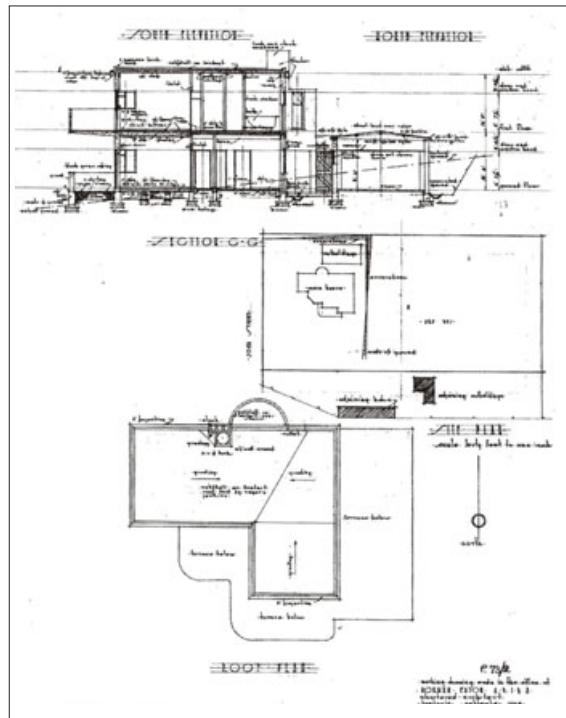
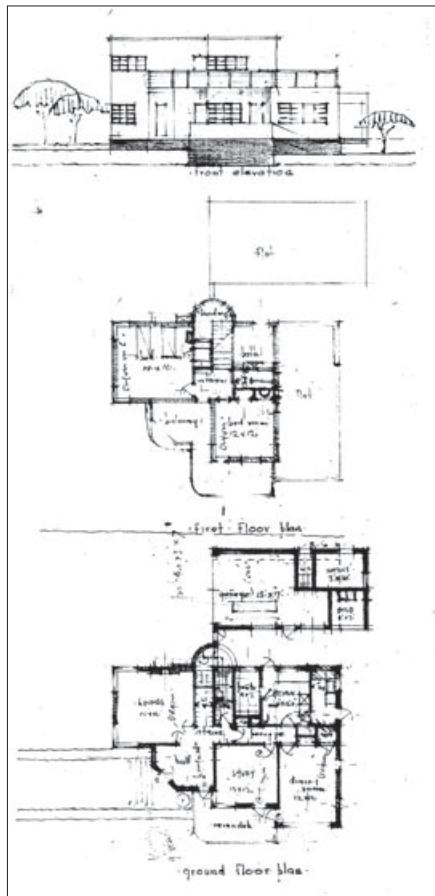


Figure 41 (left): Extract from the sketch design for **House Cordélie** for Mr Stoker*, John Street, Erf 351, Muckleneuk, Pretoria (1935) with Eaton's characteristic indigenous trees. **Figure 42 (above):** Working drawings for **House Cordélie** for Mr. Stoker*, John Street, Erf 351, Muckleneuk, Pretoria (1935).

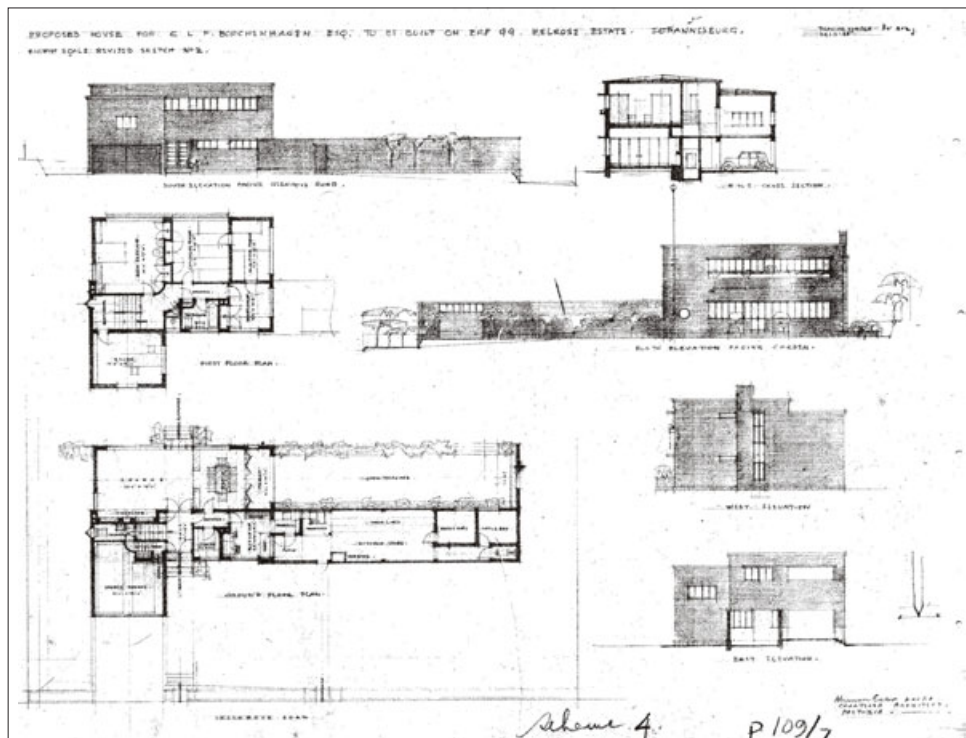


Figure 43: House Borckenhagen*, 47 Glenhove Road, Melrose Estate, Johannesburg – the first Eaton drawings showing the entire house as un-plastered brick (1935). The drawing on the left shows the 1934 scheme, and on the right is the November 1936 scheme.

quarters are linked rather tightly to the south – gone is the binding wall. The relationship between the block holding the garage and servant’s quarters and the main house, is rather strange and unusual for Eaton.

The house is raised on a brick plinth, but otherwise plastered and painted. Entrance is defined along a 45° diagonal, directly onto the north-eastern corner. This directional change to designate hierarchy is something Eaton would apply throughout his career.

One of the drawings, dated: 6.9.35, contains a note that reads ‘these sketches were made from a model’. Eaton later did additions to the house.

Title House Borckenhagen²² *

Location Stand 99, 47 Glenhove Road, Melrose Estate, Johannesburg

TOPi Reference number(s) 07575

Date(s) as per drawing(s) First design dated ‘30.09.35.’ Subsequent sketch plans are dated ‘24.11.1935.’ Later drawings are dated ‘November 1936’. Later additions were done in 1951.

Keywords Residential, Modern Movement, regional influences, Wright

Signed Norman Eaton ARIBA Chartered Architect

Original sketch plan dated 30.09.35 was a scheme for a single-storey ‘bungalow’. The later proposal (‘scheme 4’) was simplified into a narrow longitudinal plan, as in all Eaton’s approaches, ideal for the local climate – albeit now in Johannesburg. House Borckenhagen is similar to House Nicolson and Kleyn in composition, except for the most obvious absence of extruding, rounded forms. While the drawings clearly show a low-pitched roof, the house must have been constructed with a flat roof – the Repository also includes drawings dated October 1951 that show additions to the house and the replacement of the existing flat roof with a pitched one.

Similar to House Nicolson, the house turns its

back to the street. Here, the exterior terrace becomes a principal spatial organizer, contained by a built-in seat to one side and a low-binding planted wall to the other. Similar to House Nicolson, served spaces make up an L-shaped, compact ‘head’ while the servant spaces constitute the elongated ‘tail’, connected with binding walls to create an outside yard.

Eaton’s designs always bear some form of complexity – in this case, the study is on a mezzanine level above the garage, reached by one riser, with another riser leading to the bedrooms above. This allows the house to step in section so that the living room has a higher ceiling than subsidiary spaces, also a Wrightian trait.²³

Again bearing a strong resemblance to House Nicolson, the house was originally an un-plastered brick structure (today bagged, plastered and much altered), for the first time clearly expressed in the drawing of the facades – contra the drawings of House Nicolson that had also been a facebrick structure.

Again analogous to the 1939–1940 Lloyd Lewis House by Wright (Lasaeu, Tice, 1992:108), elements like stairs and balconies that had been expressed previously as elaborate form, are now absorbed in a simplified ensemble. The end of the longitudinal axis is punctuated with a Wrightian triangular projection (along only one riser), while the internal datum wall is terminated with a curve. In composition, all parts of the house are linked both vertically and horizontally. Porthole windows and mast still remind one of the ‘Streamline *Moderne*’.

²² One inevitably wonders if the house was designed for a family member of the well-known newspaper editor, Carl Borckenhagen. Drawings are for C.L.F. Borckenhagen.

²³ Refer to Motif Sheet 9, Chapter 4.

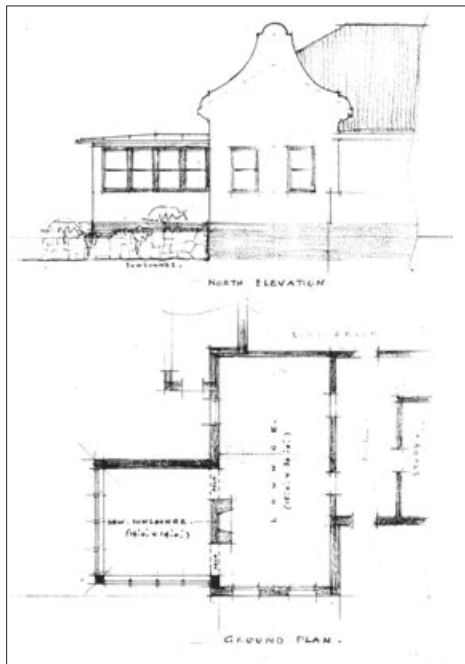


Figure 44: Extract from drawing of additions to existing Cape Dutch house for **Dr Marie Te Water**, Walker Street, Sunnyside, Pretoria (1936).

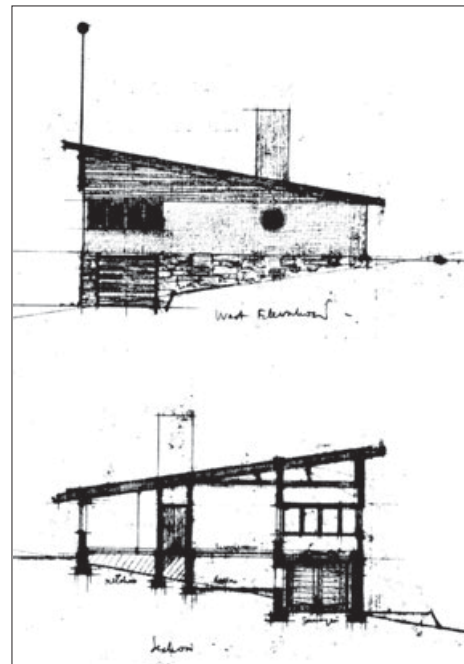


Figure 45: Extract of the initial mono-pitched roof design for **Bungalow Partridge**, Wonderboom Poort (1935) with 'Streamline Moderne' elements.

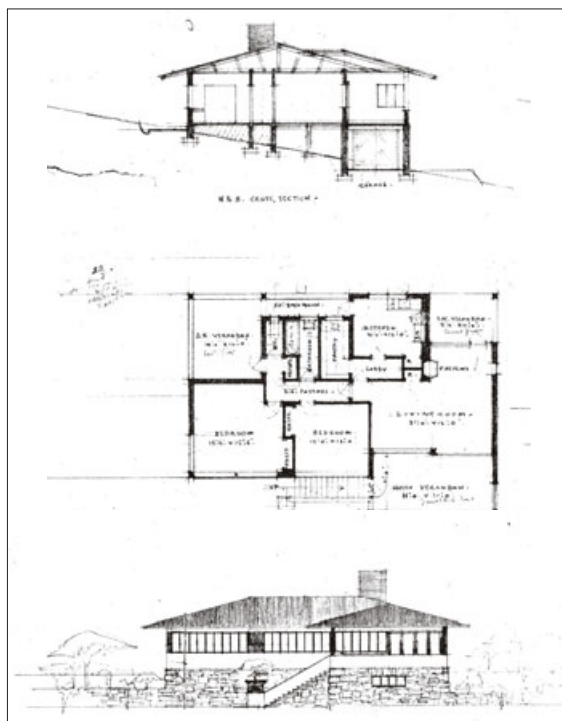


Figure 46: Bungalow Partridge (1936), Wonderboom Poort: The house seems to grow from the earth with a stone plinth. Horizontal lines, strip windows and overhanging, pitched roof, draw strong resemblance to Wright, also in the presentation of foliage seemingly growing from the house.

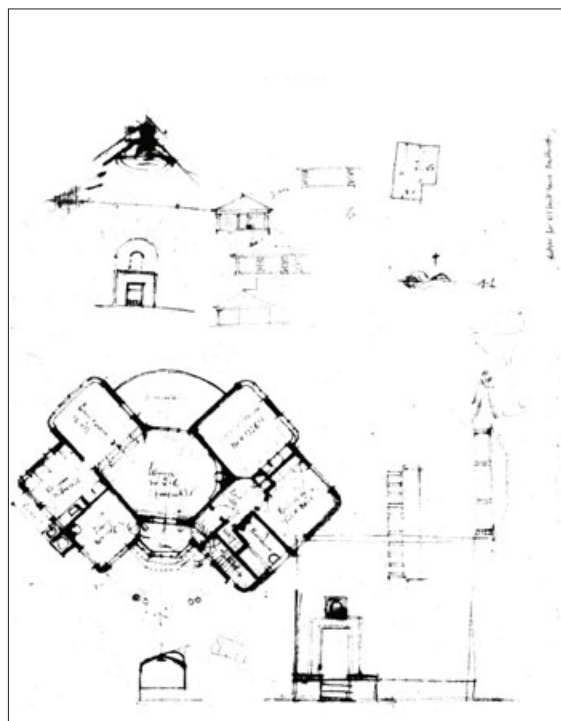


Figure 47: House N.J. Smit*, Bailey Road, Muckleneuk (1936). Note the wine glass and the caricature of a man with a fat tummy taking a nap above it (or it could be a corpse as a cross is shown above the caricature!)

1936

Title House Te Water Conversion
Location 407 Walker Street, Sunnyside, Pretoria
TOPi Reference number(s) 07587
Date(s) as per drawing(s) '7.1.36', '30.3.36.'

Keywords Alterations and additions, existing Cape Dutch styled house
Signed Norman Eaton ARIBA Chartered Architect

Proposed alterations and additions to Cape Dutch styled house for Dr Marie Te Water.

Title Bungalow Partridge
Location Wonderboom Poort
TOPi Reference number(s) 07556 and 07583
Date(s) as per drawing(s) '11.1.36.'

Keywords Residence, Baker School, Wright
Signed Norman Eaton ARIBA Architect

The stone plinth and mono-pitched roof design (unusual for Eaton) presented in the initial scheme was translated into a more traditional house. Eaton employed stone for the first time, which had been one of Herbert Baker's strongest design characteristics (Chipkin, 1993:54).

Along the lines of the Arts and Crafts, to whom the latter was much indebted, the proposed dwelling seems to grow from the sloping site, especially pertinent in the drawing of the northern facade. The fireplace is still central to the design with verandahs to the north. Functions are compartmentalized asymmetrically in the Arts and Crafts manner. Tripartite division of the facade prevails, with horizontal emphasis on windows in the Wrightian idiom. The roof overhangs are consciously prominent – also an unmistakable departure from the flat roofs of the International Style.

Title House N.J. Smit*
Location Erf 661, Bailey Road, Muckleneuk
TOPi Reference number(s) 07579 and 07522
Date(s) as per drawing(s) 'June 20th 1936'

Keywords Residence, Moerdyk
Signed Norman Eaton ARIBA Architect

Although similarities in the stepping facade remind us of House Cordélie (1935), the design for House Smit is a very unusual one for Eaton: a clustered typology centred around the main living space is reminiscent of Moerdyk's residential work. Similar to Moerdyk's layouts, the central living space is flanked tightly by ancillary functions on east and west, whilst connecting to northern sun and southern light via stoeps.

Although the formal outcome is quite different, the layout is a modernized interpretation of the *plaashuis vir die heer* J.S. Smit LVR Klerksdorp, as published in *Die Boerevrou*, December 1920 (Fisher, Le Roux, 1920; 1989:10).

The arched fire-place, in the central space, is reminiscent of the interior arches of the Voortrekker Monument. Not at all like Moerdyk, is the flat concrete roof with strong horizontal emphasis.²⁴

The house was substantially altered over time.

²⁴ There is perhaps an interesting analogue between Moerdyk's farmstead for J.S. Smit, Eaton's house N.J. Smit and his later Greenwood Village. One wonders whether there might not be a connection between the two Smits.

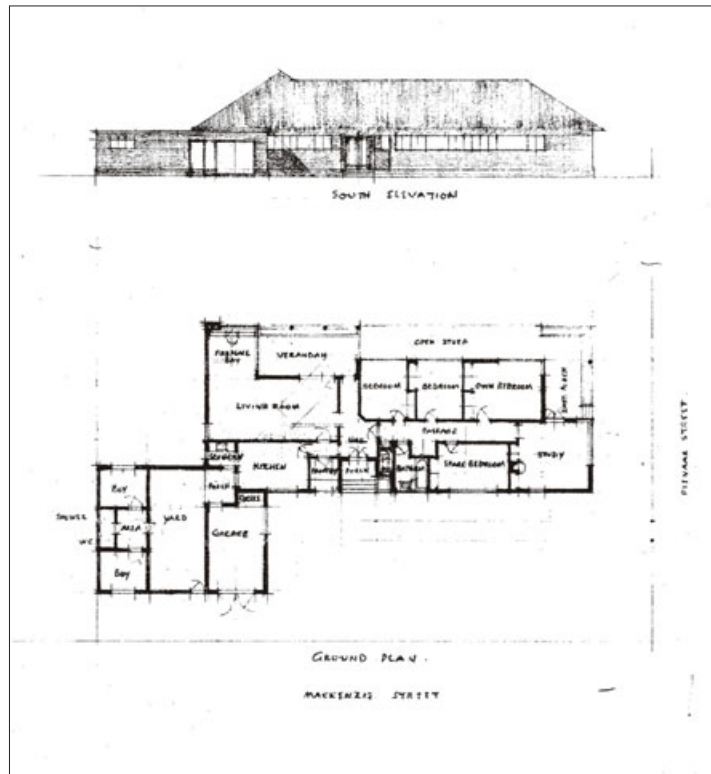


Figure 48: First, un-built design for House Theron cor. Mackenzie and Pienaar Streets, Brooklyn, Pretoria (1936).

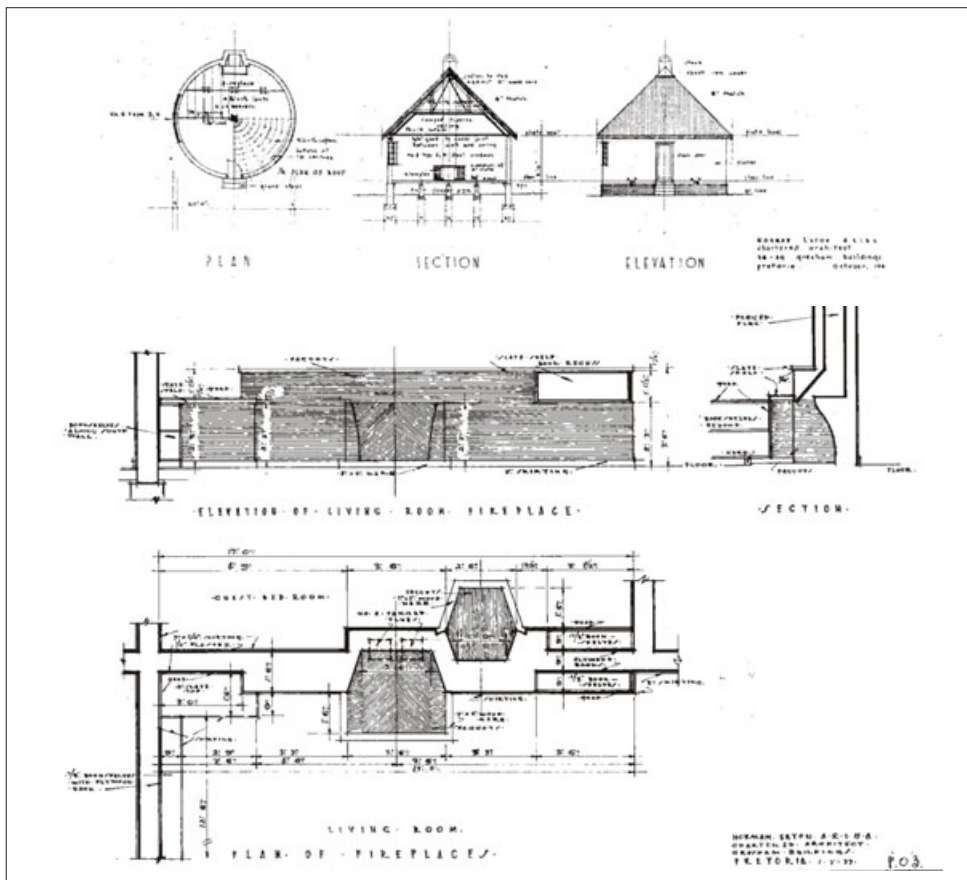


Figure 49: Working drawings of House Kling, additions and alterations to a house in Town Lands, Quaggaspoort Road, Pretoria (1936).

Title House Theron

Location cor. Mackenzie and Pienaar Streets, Brooklyn, Pretoria

TOPi Reference number(s) 07735

Date(s) as per drawing(s) '18/9/36'

Keywords Residence, Wright, Stauch

Signed Norman Eaton ARIBA Architect

The first proposal for House Theron was very modest: a straightforward, single-storey, longitudinal, narrow design, with a northern stoep responding to the climate. The now elongated, irregular L-form results because of the location of services (similar to his previous schemes from the Nigel housing prototype, to Houses Nicolson, Viljoen, Borckenhagen, Rademeyer). However, up to this point, almost all of Eaton's house designs were double storey, which had resolved the division between public and private realms. For House Theron, he used the entrance porch and hallway to create the horizontal demarcation of public and private. Rooms are then compartmentalized along a long narrow corridor, with main bedrooms facing north along one side of the entranceway and living room opening onto the northern verandah on the other side. Subsidiary functions are placed along the south of the corridor.

Although Eaton had used the corridor previously as a mere connector of spaces (Cottage Smook, Houses Frommurze and Barkham), it had never been the central spatial and programmatic divider or datum. The 1936 design for House Theron is possibly the first of many Pretoria house designs that would follow this particular design scheme, before it was made ubiquitous by Hellmut Stauch and Aubrey Nunn during the later 1930s to early 1940s.²⁵

Different to the typically centrally placed windows of Stauch, Eaton employs horizontal strip windows. Along with a corrugated iron roof, he

again uses common brick for the house. During the same year, he had befriended Viennese-born architect-engineer Robert Schmickl.²⁶ Together, they would make 'over-fired and malformed bricks fashionable for financially strapped home-builders' (Fisher, 1997:79).

Interestingly, Casa Bedo (1936–1937) designed by Cowin, published in the November 1938 issue of the SAAR (Anon, 1938:428) would pave the way for a 'Transvaal suburban vernacular' (Cooke in Beck, 1985:59) in Johannesburg. While structural brick walls were used in the rear of that house, the rest gave way to delicate steel columns that held a Miesian inspired roof as floating plane, with deep protecting overhangs. Quite different to Eaton's planning, Cowin's design has no corridor, instead, a pinwheel plan divides space in a centrifugal arrangement.

Title Proposed addition of outbuildings and rondaval (sic) to residence at Townlands for K. Kling Esq.

Location Townlands, Quaggaspoort Road, Pretoria

TOPi Reference number(s) 07828

Date(s) as per drawing(s) 9.10.36

Keywords Addition to residence, Moerdyk, rondavel, faggot tiles

Signed Norman Eaton ARIBA Chartered Architect

The new outbuildings and additions to the existing house remind us of Moerdyk's rondavel houses. Notice the site strategy – a careful composition between the existing and the new is es-

²⁵ Refer to Chapter 2 of this document, as well as Motif Sheet 7, Chapter 4.

²⁶ Schmickl had set up his own practice and had offices close to Eaton's offices. Eaton later employed him as his backroom assistant during the war. Schmickl not only had a noted influence on Eaton (Du Toit, 1989:8), he also made a huge contribution to Pretoria architecture.

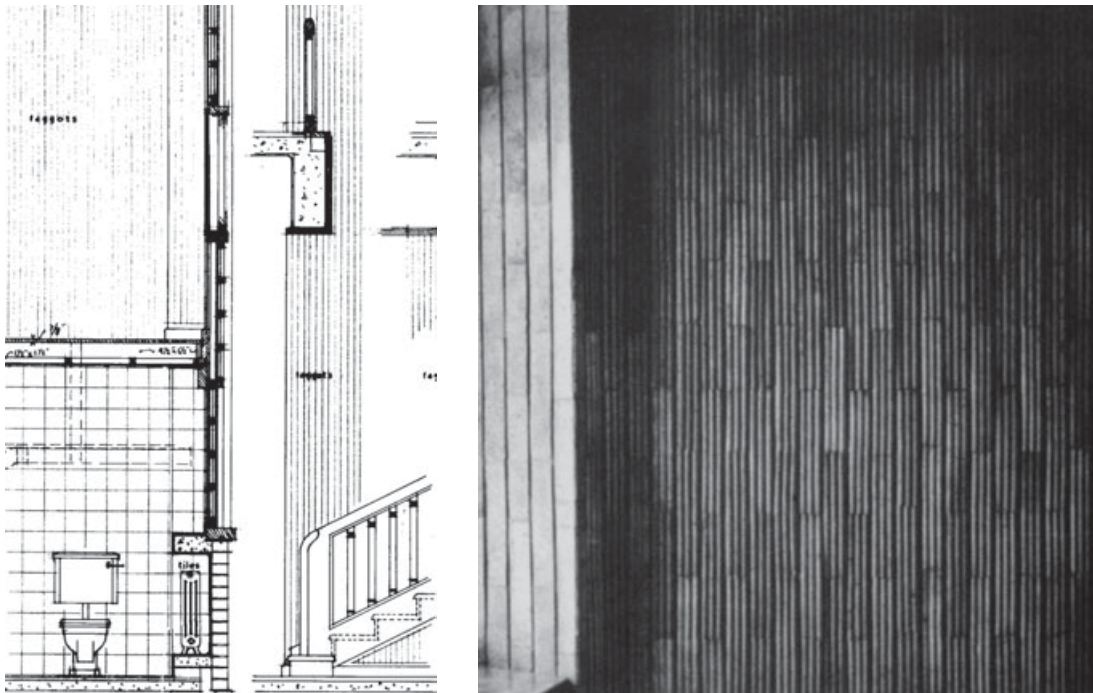


Figure 50 (top left): An extract from the interior drawing of the Land Bank in Potchefstroom, showing the word 'faggots' to describe the **vertically corrugated glazed tile surfaces** (1941). **Figure 51 (top right):** An image of the interior wall surfaces of the Land Bank (1940–1941), Potchefstroom (Image from Harrop-Allin, 1975:44).

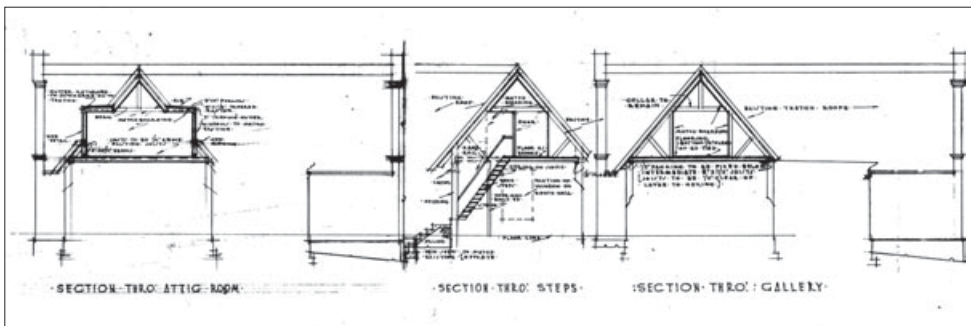
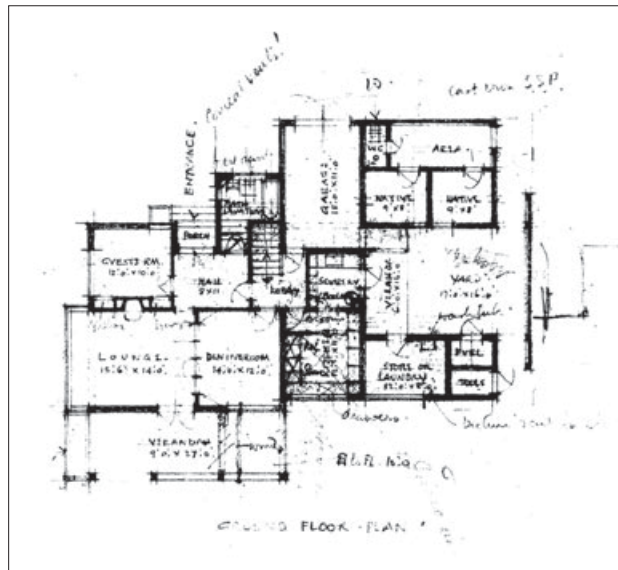


Figure 52 (top right): Extract of drawing for the double storey option for **House Theron*** (1937), cor. Pienaar and Mackenzie Streets, Brooklyn, Pretoria. **Figure 53 (bottom):** Extract of drawing for alterations to existing **House Curlewis***, originally by Gordon Leith (1927), 357 Edward Street, Waterkloof, Pretoria.

tablished by a simple alignment. The new outside rondavel punctuates the adjacent short leg of the L-shaped outbuilding. The simple articulation and ordering render an overall cohesion.

The drawings also include detail of a new brick fireplace – where Eaton seemingly uses ‘faggoting’ for the first time. The word ‘faggot’ means ‘bundle of sticks’,²⁷ but in building terms refers to a smaller or half-sized, baked brick.²⁸ In later years, Eaton used corrugated, glazed tiles that he also called ‘faggots’ as a metaphor to recreate reeded surface patterns in his Bank buildings (e.g. Land Bank Potchefstroom, 1940–1941), reminiscent of African reed weaving. His artist friend Alexis Preller had suggested that the derivation of ‘faggoting’ was Eaton’s appreciation of the bas-relief wall in the Tomb of Ti at Sakarra, which he had encountered on his travels to Egypt (Preller, 1966:10).

He further maintained that ‘this kind of treatment was of African derivation, being inspired by the fine example of tribal grass mats that Eaton admired and collected’ (Harrop-Allin, 1975:80).

It is not clear from the drawing of the fireplace whether he used similar tiling for the recreation of the faggots in House Kling as for his later Bank buildings. The latter were all rendered as vertical repetitive textures and were drawn differently. For House Kling, the faggoting is horizontal on walls and inside the fireplace, at angles. Eaton’s first conscious reference to African textures in his domestic work would only follow in 1940, with House van Der Merwe.

In the case of House Kling, the researcher draws the conclusion that the faggots were used half-bricks as an affordable alternative to dress surfaces and articulate the fireplace – something that was applied quite often in houses constructed for cash-strapped clients at the time.²⁹

1937

Title House Theron*

Location cor. Pienaar and Mackenzie Streets, Brooklyn, Pretoria

TOPi Reference number(s) 07735

Date(s) as per drawing(s) ‘20.1.37.’

Keywords Residence, double-storey

Signed Norman Eaton ARIBA Architect

A double-storey alternative scheme replaced the previous single-storey proposal. The design is much more compact and irregular, gone is the seeming restraint of the initial proposal. Services are tightly arranged around a small courtyard, with the remainder of the house taking on a simple vertical division of living and sleeping quarters.

Title Alterations to House Curlewis*

Location 357 Edward Street, Waterkloof, Pretoria

TOPi Reference number(s) 07566

Date(s) as per drawing(s) ‘February 1937’

Keywords Residence, alterations, Leith

Signed Norman Eaton ARIBA Architect

A gallery addition to a house originally designed by Gordon Leith in Waterkloof, dated February 1937. The drawings describe the owner as being Advocate Ivan Curlewis.

²⁷ Refer to Chapter 3, Footnote 2 (p. 29).

²⁸ In a personal communication with retired Prof. Hans Wegelin (b. 1940), he confirmed that the term was used quite loosely for any brick smaller than the norm and was used normally as a dressing of surfaces. Prof. Wegelin is author of the book *Construction primer for Southern Africa* (2009, Pretoria: Visual Books).

²⁹ Personal communication with Piet Le Roux (1917–2012), who had been a building contractor at the time for, amongst others, Leith and Moerdyk.

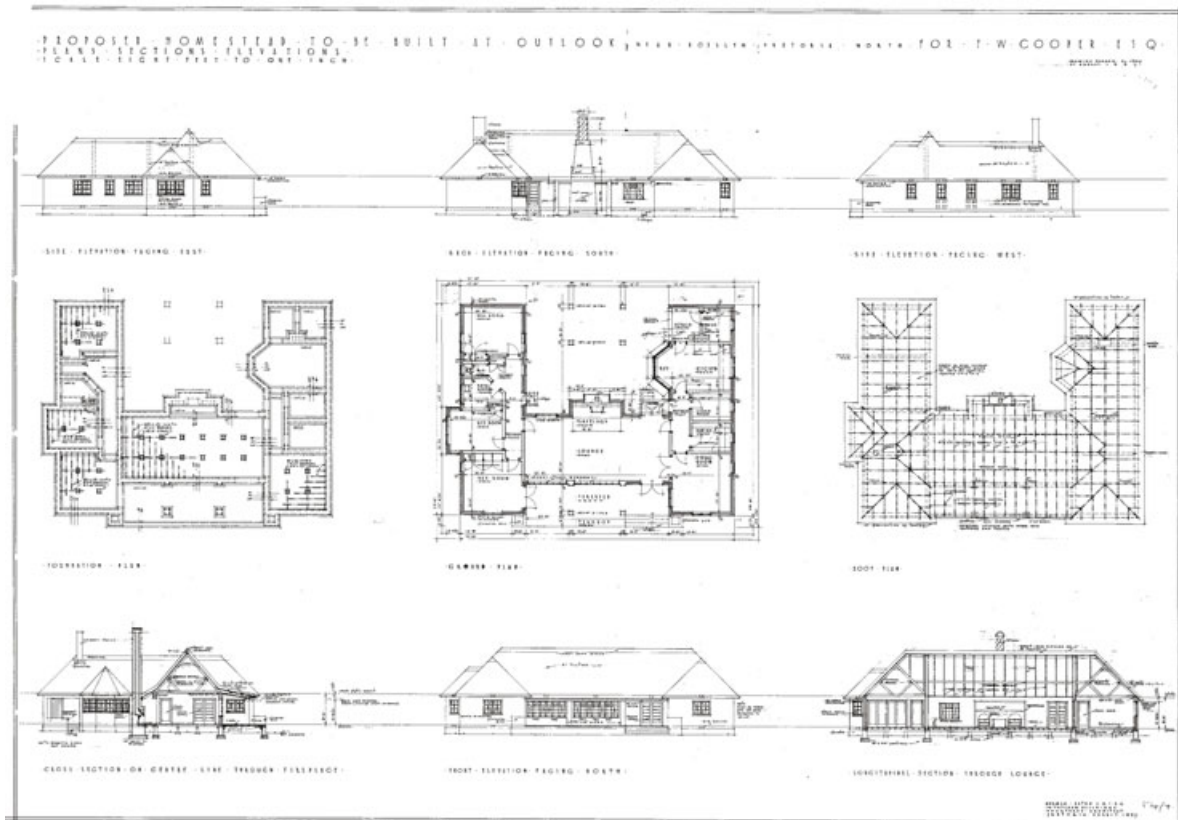
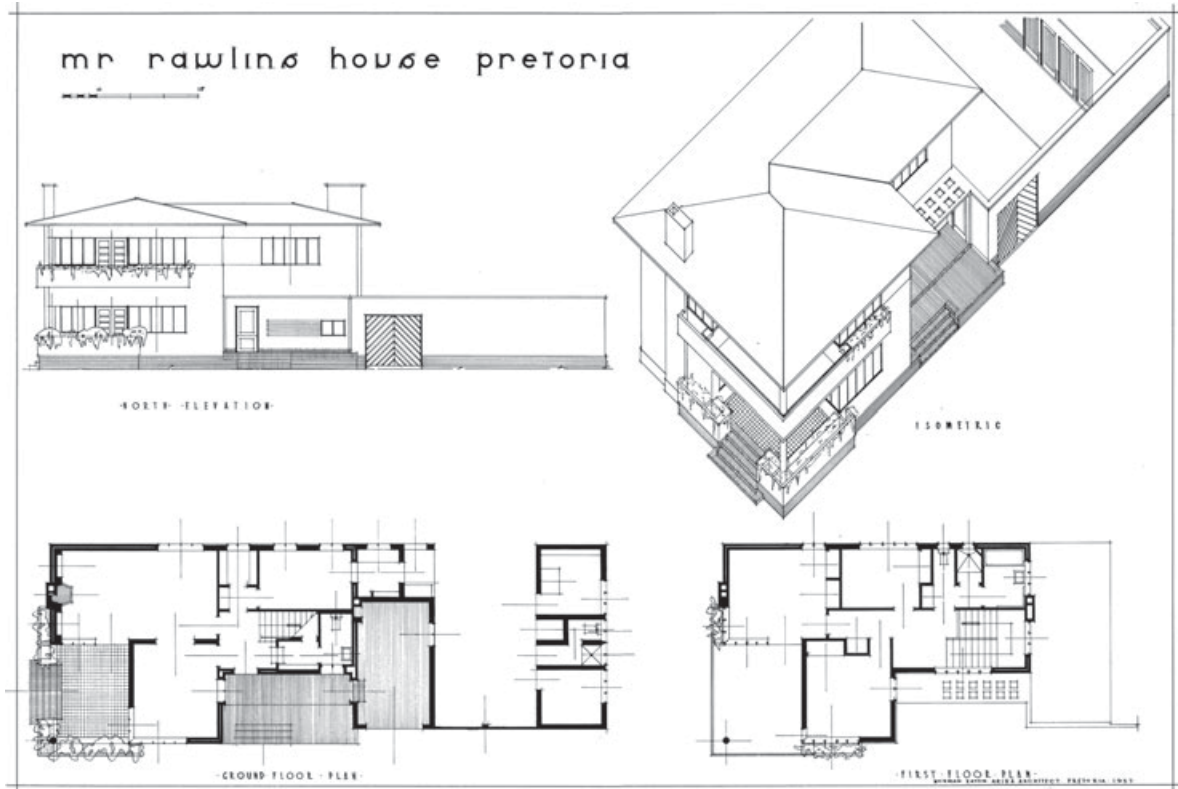


Figure 54 (top): House Rawlins*, Erf 384, Mackenzie Street, Brooklyn (1937), redrawn for the 1937 exhibition. Figure 55 (bottom): Homestead Cooper, on the farm 'Outlook' near, Pyramids/Rosslyn, Pretoria (1937).

Title House Rawlins*

Location Erf 384, Mackenzie Street, Brooklyn

TOPi Reference number(s) 07737 and 07570

Date(s) as per drawing(s) '12.3.37.'

Keywords Residence, Wright, Modern Movement

Signed Norman Eaton ARIBA Architect

The house is set back a distance to the south of the street, making the most of northern exposure. A similar plan typology used for houses Borckenhagen, Nicolson and Kleyn is employed. However, the Rawlins house lacks the punctuated longitudinal axis, elaborate service wing and overall articulated horizontality. Similar to the first House Theron and Bungalow Partridge, Wrightian deep roof overhangs are employed, with horizontal strip windows along the shadow line.

While the northern loggia, terrace, and yard seem to have been almost carved out of the overall rectangular form, the plan is an amalgamation of the lineage of his work to date: from the letter-type to early Wrightian influences. The loggia is contained by low-binding planted walls. Similar to Wright's Lloyd Lewis House (1940) and the earlier Avery Coonley House (1907), Riverside, Illinois, Chicago, USA served spaces make up a 'head' while the servant spaces constitute the 'tail' (Laseau, Tice, 1992:108).

Typical also of Wright, the axis of the house originates in the hearth and expands into the living area. The vertical chimneys hold the 'head' intact whilst balancing the composition between vertical and horizontal. The roof articulates entrance and stairs. Square cut-outs in the slab over the entrance porch are once again decidedly Wrightian.³⁰

Title Homestead Cooper

Location On the farm 'Outlook', near Pyramids/Rosslyn, Pretoria

TOPi Reference number(s) 07744 or 07557

Date(s) as per drawing(s) '23 August 1937'

Keywords Residence, Leith, Moerdyk, *Afrikaanse woonhuis* [Afrikaans residence]

Signed Norman Eaton ARIBA Chartered Architect

Contrasting the exploration in his work to date, the design for Homestead Cooper draws from his earliest work. Very similar to the 'Laurels' Cottage (1930), it is an H-plan with verandahs on both south and north of the house, thatched roof, cottage pane windows, centrally articulated fireplace and curvilinear chimney details reminiscent of Leith and Moerdyk.

Eaton seemed to reserve the language of the Modern Movement for the city, while he follows Moerdyk's advocacy towards an *Afrikaanse woonhuis* [Afrikaans residence] as for Farmstead Hill (1932), Farmhouse Turvey (1934) and so on, for dwellings in the landscape.

Title Alterations to House Price

Location No 14 Sherborne Road, Johannesburg

TOPi Reference number(s) no number

Date(s) as per drawing(s) 'October 1937'

Keywords Alterations to existing residence

Signed Norman Eaton ARIBA Chartered Architect

No image.

³⁰ Refer to Motif Sheets 3 and 9, Chapter 4.

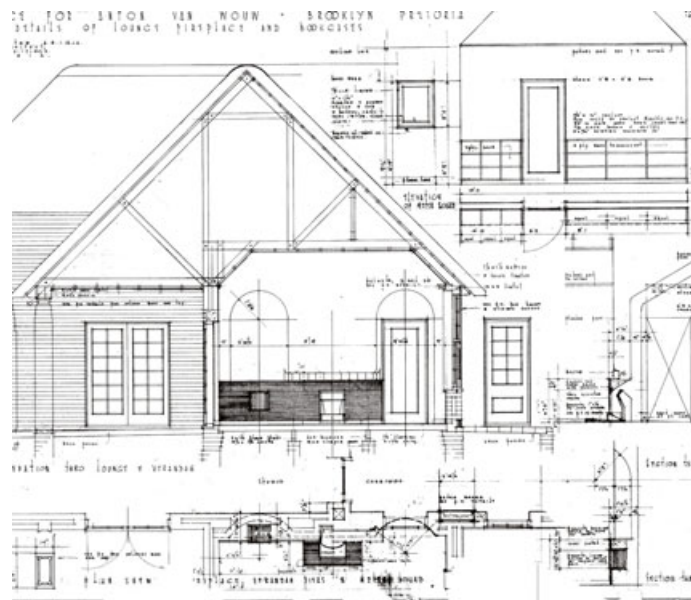
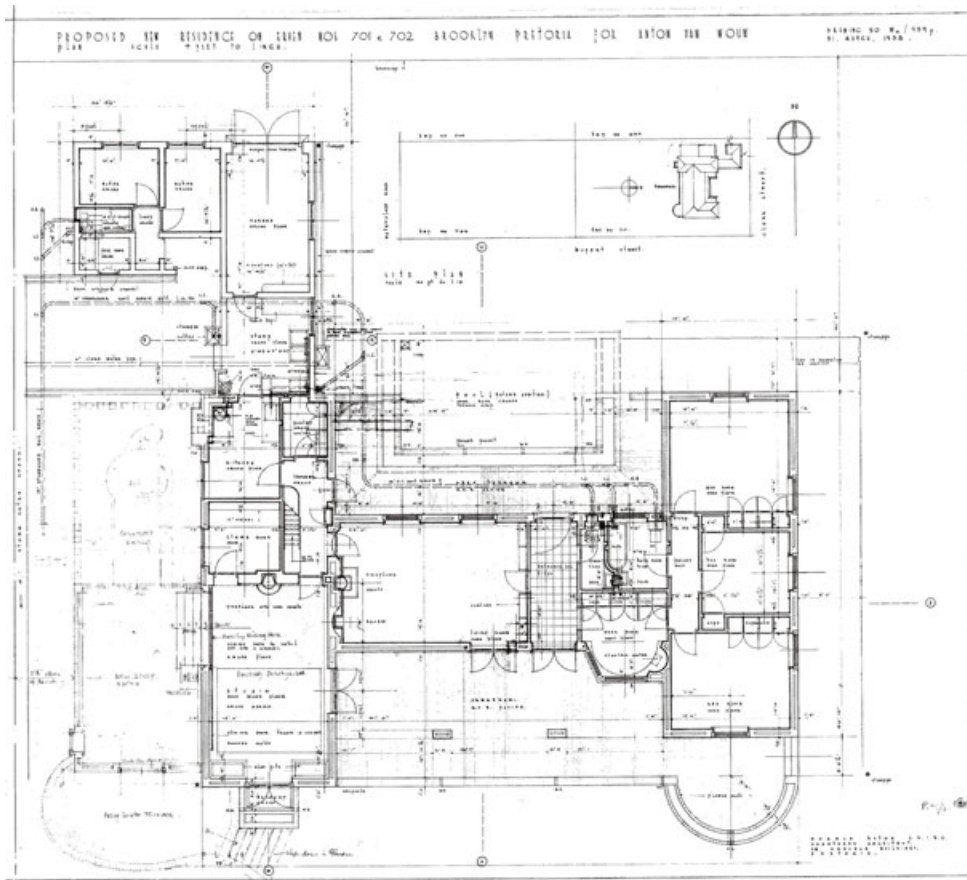


Figure 56 (top): The letter-type plan for **House and Studio Van Wouw** (1937–1938). The house is currently owned by the University of Pretoria and is in pristine condition. **Figure 57 (left):** Sections and elevations of **House and Studio Van Wouw***, Corner of Rupert and Clark Streets, Brooklyn (1937–1938). **Figure 58 (above, detail):** Section of **House and Studio Van Wouw***, Corner of Rupert and Clark Streets, Brooklyn (1937–1938).

Title House and studio Van Wouw*

Location cor. Rupert/Clark Streets Brooklyn, Pretoria

TOPi Reference number(s) 06946

Date(s) as per drawing(s) Started in 1937, working drawings: '31 March 1938', '16 June 1938' respectively

Keywords Residence, Artist studio, Pretoria Regionalism, *Afrikaanse Woonhuis*, Romanticism

Signed Norman Eaton ARIBA Chartered Architect

House and studio for sculptor Anton Van Wouw show a progression towards a 'romantic and organic expression' (Harrop-Allin, 1975:31–32). Van Wouw was one of the group of persons who supported Afrikaner Nationalist identity. This identity was, amongst others, reflected in the heralding of an appropriate architecture for the Transvaal at the time. House/studio Van Wouw is the culmination of Eaton's design lineage to date. With strong reference to his interpretations of the *Afrikaanse Woonhuis*, the design also draws from various sources. In plan-form it is reminiscent of the Cape Dutch as seen for the first time in the Laurels Cottage, of Arts and Crafts asymmetry and craftsmanship, of House Boyes's centrifugal arrangement, to more implicit Wrightian manifestations in, for example semicircular repetitions, planter boxes and so on. Deep recessed verandahs, thatched roof and exterior walls of local ochre facebrick are ascribed to the so-called 'Pretoria Regionalism' (Fisher, 1998: 125). Shutters are new to the climatically responsive Eaton repertoire.

A built-in seat (recalling Cape Dutch heritage) towards the terraced garden makes the house seem to grow from nature. The western portion is double-storied and consists of the double-volume studio and a mezzanine loft study from which Van Wouw could look down. A full-length window opens onto the garden from the latter space. Similar to the design for Cottage Mog-

geridge (1932), the vertical full-length window responds to the double-volume. A balance is struck between horizontality and verticality through unifying repetition of window and door elements, horizontal definition of brick coursework and considered vertical articulation. A poetic sense of place is enhanced through defined embracement of outside spaces, establishing a clear sense of arrival, of vistas onto nature and connectedness between inside and outside. Textures, both vertically and horizontally, contribute to the warm, humane quality of spaces. Unfortunately, the drawings do not always convey the spatial richness of the built product.

Significantly, the design of the Van Wouw House and studio, Houses Theron, Rawlins and Homestead Cooper, all happened at the same time the Argus Ideal Homes Competition (1937) was launched in an attempt to popularize the International Style Home in South Africa (Barker, 2012:90).

1938

Title Proposed Residence for Dr Tosi

Location Westend

TOPi Reference number(s) 07521

Date(s) as per drawing(s) '28th February 1938' and '28/2/38' respectively

Keywords Residence, Modern Movement, Regionalism, Le Corbusier, Maison Citrohan

Signed Norman Eaton ARIBA Chartered Architect

In stark contrast to House Van Wouw, which Eaton was busy with simultaneously – and unlike the proposals for various houses in Westend that Eaton had done previously (1935) for the same client – the design proposal for the 1938 Residence Tosi was a simple modern box.

Resting directly on the ground, the design was suggestive of Le Corbusier's 'Maison Citrohan' project (1920), exhibited in the Salon d'Automne,

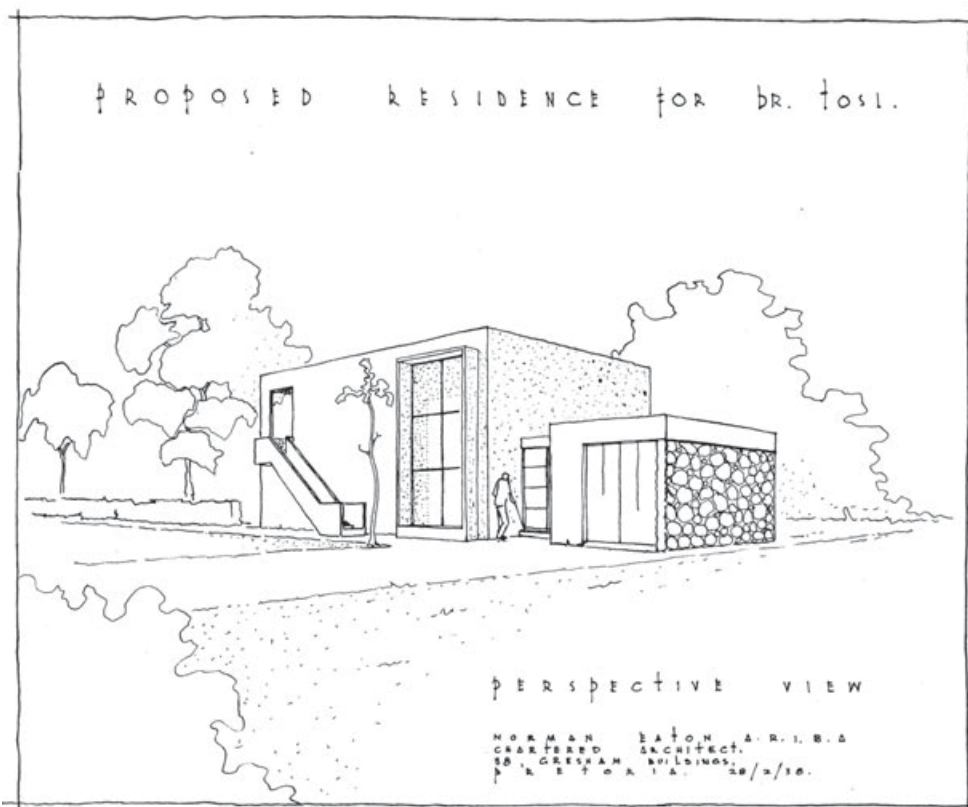
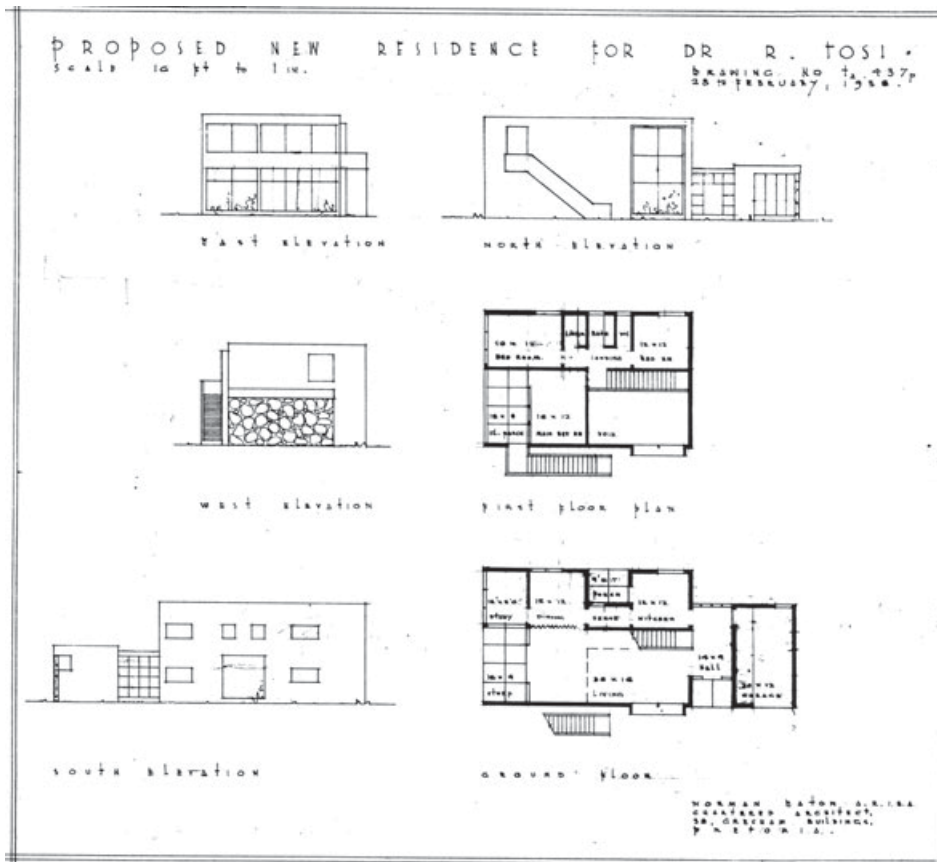


Figure 59 (top): Plans of House Tosi (1938) with external staircase.
Figure 60 (bottom): A Citrohan derivative: House Tosi, Westend (1938).

Paris.³¹ Interestingly, Le Corbusier had developed the model for the Maison Citrohan from the traditional megaron form of the Mediterranean, Greek vernacular house.

Within the basic type, he had projected for the first time his characteristic double-height living space, with mezzanine sleeping area and children's bedrooms on the flat roof. Le Corbusier had developed Maison Citrohan as a rectilinear volume, with two lateral bearing walls left as white, stuccoed spaces. The name was derived as a pun on the name of the French Citroën automaker, for the modern industrial methods and materials Le Corbusier advocated using for the house (Frampton, 1980; 1992:153–154). The model for the Masion Citrohan anticipated Le Corbusier's later 'Five Points' (1926), with its use of strip-windowed facades and cantilevered floor slabs (*ibid.*:157). The 'Five Points' would form the point of departure for the Transvaal Group's primer towards the design of pure white cubic forms (Cooke, 1988:18–19). Despite the fact that Martienssen, champion of the Transvaal Group and follower of Le Corbusier's purist ideals, had also travelled to rural buildings in Europe (which he evidently also documented), he never translated the vernacular forms to soften the 'untenable cubist forms of his houses' (Barker, 2012:79).

Perhaps of significance, Le Corbusier's regionalist Mathes House (1935), with the use of local stone and timber, was published in the March 1938 issue of the *SAAR*, which contributed towards a new universal regional architectural direction (Barker, 2012:80).

Designed just prior to the local publication of the Mathes House, Eaton's Citrohan derivative shows similar regional tempering of white stuccoed masses. Also in the same vernacular spirit as Le Corbusier's house for Madame de Mandrot (1931), near Toulon, France, where Le Corbusier had employed rubble stone and timber framed

openings (Barker, 2012:82), Eaton's design proposal renders (presumably local) stone for the western wall of House Tosi. On the northern side, the double volume living space is expressed in a double-height window with protecting extruded frame. The extruded frame would become a Martienssen trait (Chipkin, 1993:181), as demonstrated in the design of his own house (1940) and as subsequently proliferated in Johannesburg. Where Eaton had used the frame to protect the northern window openings, Martienssen, however, used the frame to address the street formally.

Served and servant spaces are clearly demarcated as a very rational scheme in Eaton's design. A datum wall separates the living room and kitchen, while an entrance hall separates the main house from the garage. The main bedroom is on the first floor and only accessible from the external Citrohan-like staircase. A porch is recessed under the main bedroom to extend the living room to the east, similar to Hanson's own house where the raised bedroom allows for a ground floor garden shelter. Unlike Hanson and the Transvaal Group, Eaton hardly ever used *pilotis* in the Corbusier idiom. The only exception was perhaps in the Frommurze House (1934) – but there it was employed to free up the plan, not to elevate the house.

The design came at an unusual time in the lineage of Eaton's development. The reports in *The Star*, following the Argus Ideal Homes Competition (1937), published the previous year, might have propelled his client to request the direction of the design.

31 Refer to Motif Sheet 6, Chapter 4.

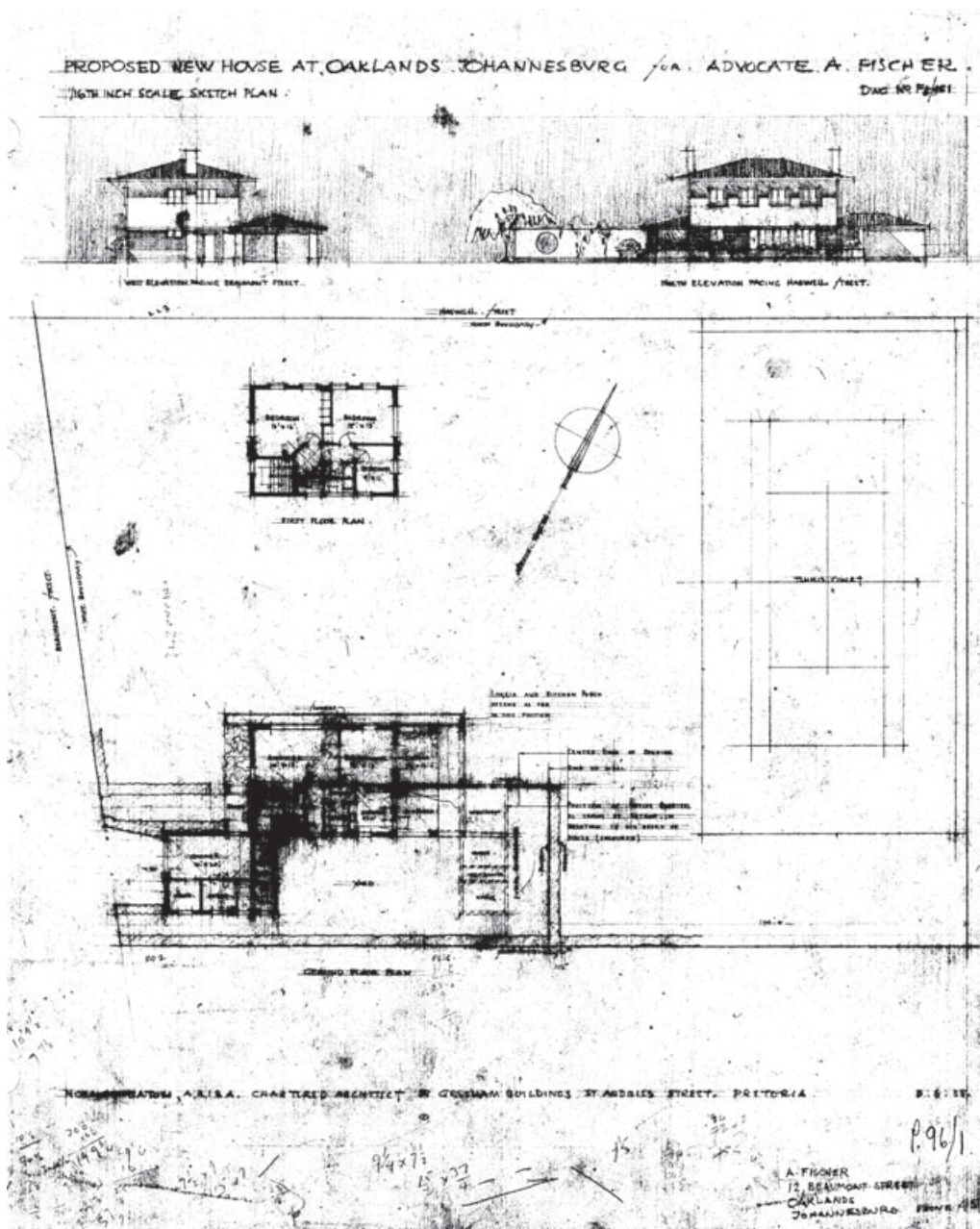


Figure 61: House Bram Fischer*, 12 Beaumont Street, Oaklands, Johannesburg (1938).

Title House Fischer*

Location 12 Beaumont Street, Oaklands, Johannesburg

TOPi Reference number(s) 07553

Date(s) as per drawing(s) '5.8.38.'

Keywords Residence, Bram Fischer, Modern Movement, Regionalism, Wright, brick

Signed Norman Eaton ARIBA Chartered Architect

House Fischer is a culmination of embedded vocabularies in the family tree of Eaton's residential work to date. Designed for well-known advocate Bram Fischer in Johannesburg, it would be '... a house that would prove to be of special significance in South Africa's history' (Chipkin, 2008:375). There are several references to the house in the book *Burger's Daughter* (United Kingdom: Jonathan Cape, 1979) by well-known author Nadine Gordimer.

In his authoritative biography on Bram Fischer's life, Haasbroek (2011:158 onwards) describes the life and times at the Fischer's house in great detail. Although he does not mention that the architect was Norman Eaton, various descriptions capture the mood of the place and also the special significance the house and garden had for the Fischers, and how it would ultimately become a personification of Molly Fischer, Bram's remarkable wife. She, however, had not been too pleased with some design aspects at the outset of the project:

Molly het haar lot ... bekla dat haar idees en wense oor die huis gewoonlik deur Bram en die argitek in die kiem gesmoor word. Die hare het veral gewaai oor 'n 'hideous porch' aan die voorkant wat Molly geensins aangestaan het nie, maar waarvan Bram nogal gehou het' (Haasbroek, 2011:159).

Even more significantly, the house would become a symbol for the struggle against *apartheid*:

Vir sommige linkses was die swembad ook 'n simbool van die nuwe Suid-Afrika waar almal ongeag van kleur vrylik meng. Die huis het vir hulle 'n *struggle* simbool geword (Haasbroek, 2011:203).

Haasbroek described the Fischer house and swimming pool, where both black and white were welcome, as emphasizing the meaning of

... [N]on-racialism at a time when such a thing was largely unthinkable in a wealthy white suburb in the apartheid era. As a result the Fischers had to tread warily in handling the thorny question of an 'open' house and swimming pool in those years, while the profusion of visitors obviously had an inhibiting effect on their family cohesion, privacy and life style (Haasbroek, 2011:175).

The plan arrangement recalls the first design for House Theron (1936) in its rectangular simplicity, whilst also building on the typology as already established in the Borckenhagen, Nicolson and Rawlins houses. However, it lacks the strong horizontal 'strip-like' windows and closer associations with the Modern Movement as executed in these examples, in fact, it would have a vertical accentuation brought about by the introduction of individual rectangular windows. The seemingly higher, plastered, and painted first floor in relation to the lower, unplastered ground floor somehow also enhances the effect of the vertical.

Chipkin (2008:376) describes the house as:

... [U]nlike the contemporary examples of the Modern Movement in the nearby suburb of Lower Houghton, only the upper floors are white plastered. The ground floors are earth bound and built in facebrick with plinth extensions becoming planters that define spa-

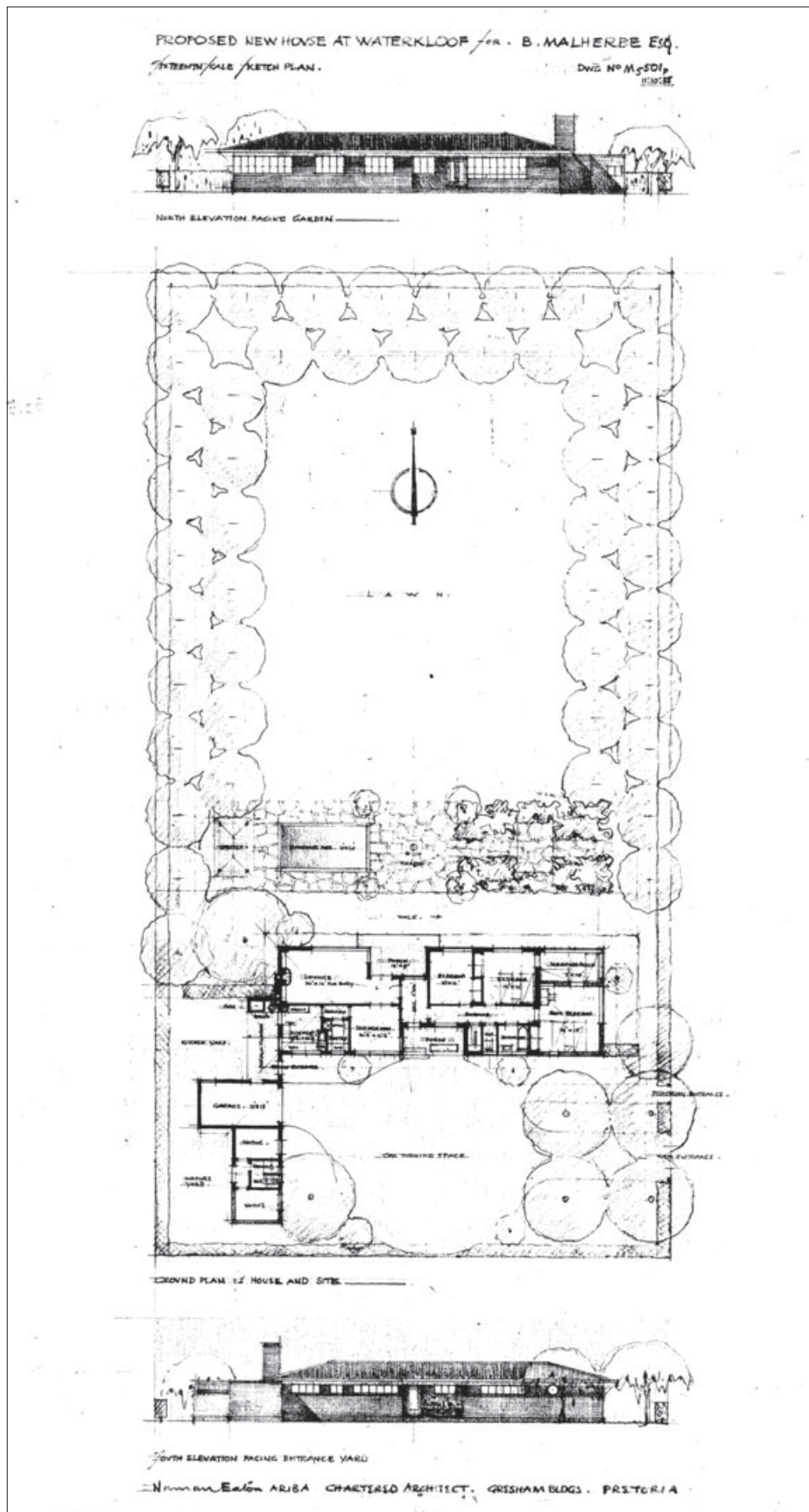


Figure 62: House Malherbe, Waterkloof, Pretoria (1938).

tial use. There is sensitivity in the handling of brick as building block with brick-on-edge as wall copings; with bold, broad verandah piers, and with honeycomb patterned brick-work breezeway of the entrance porch.

Similar to the plan arrangement in House Tosi of the same year, a clear distinction is made between served and servant spaces by means of a central spine wall. The U-shaped arrangement is held together by the binding wall, which extends beyond the house to hierarchically articulate the entrance from the street side and bind services on the other side. While the U-shape had been perpetuated in his Arts and Crafts-like cottages (e.g. Cottage Moggeridge), here the wall acts as divider of servant and served spaces.

The extended, site-bounding wall, described by Chipkin (2008:375) as an ‘incomplete metaphor’, as it does not reach into the house, is articulated with a circle and semicircle, typical of Wright. With the usual brick plinth, the rest of the wall is plastered and painted, constructing a balance with the seemingly floating first floor and the services to the other side.

Even though this is still Eaton ‘without Africa’ (Chipkin, 2008:376), the selective use of texture in the form of horizontal brick coursework is yet again used to enhance spatial quality and articulate architectural elements. The drawings, with seemingly indigenous tree and Wrightian planter boxes, again project a humane quality.

Title House Malherbe

Location Waterkloof, Pretoria

TOPi Reference number(s) 07564

Date(s) as per drawing(s) ‘11.10.38.’

Keywords Residence, Modern Movement, Regionalism, Wright, brick

Signed Norman Eaton ARIBA Chartered Architect

The simple design scheme and functional zoning are the same as that of the first un-built proposal for House Theron (1936). Rooms are arranged on either side of the corridor, which acts as central spatial divider and connector for the design. Living room, porch, sleeping porch and bedrooms face north, while ancillary spaces are on the southern side of the axis. Additional servant spaces are housed in the shorter leg of the L. A car turning space is now contained by the L-shape to the south of the house. Garden layout, with careful alignment of swimming pool, responds to the sensible position of the house, overlooking the site northwards, and opening up in relation to the northern facade.

While Eaton had always demonstrated his sensitivity to plants and landscaping in relation to his designs in drawings and site plans (e.g. Houses Nicolson, Viljoen, Frommurze), the site plan for House Malherbe shows a very deliberate extension of the design rationale. Again Eaton sets the scene for the residential work of Stauch and Nunn during the same period. Here, as in House Theron, Eaton tempers and constrains Wrightian elements such as deep overhangs, horizontal strip-windows, un-plastered brick walls with strong emphasis on horizontal coursework and the bold vertical chimney.

Following the Ideal Homes Competition, *The Star* had noted the year before that the South African house was slowly developing as a ‘low light building with dark flat pitched roof, large unobstructed windows sheltered by deep eaves’ (Herbert, 1975:165).

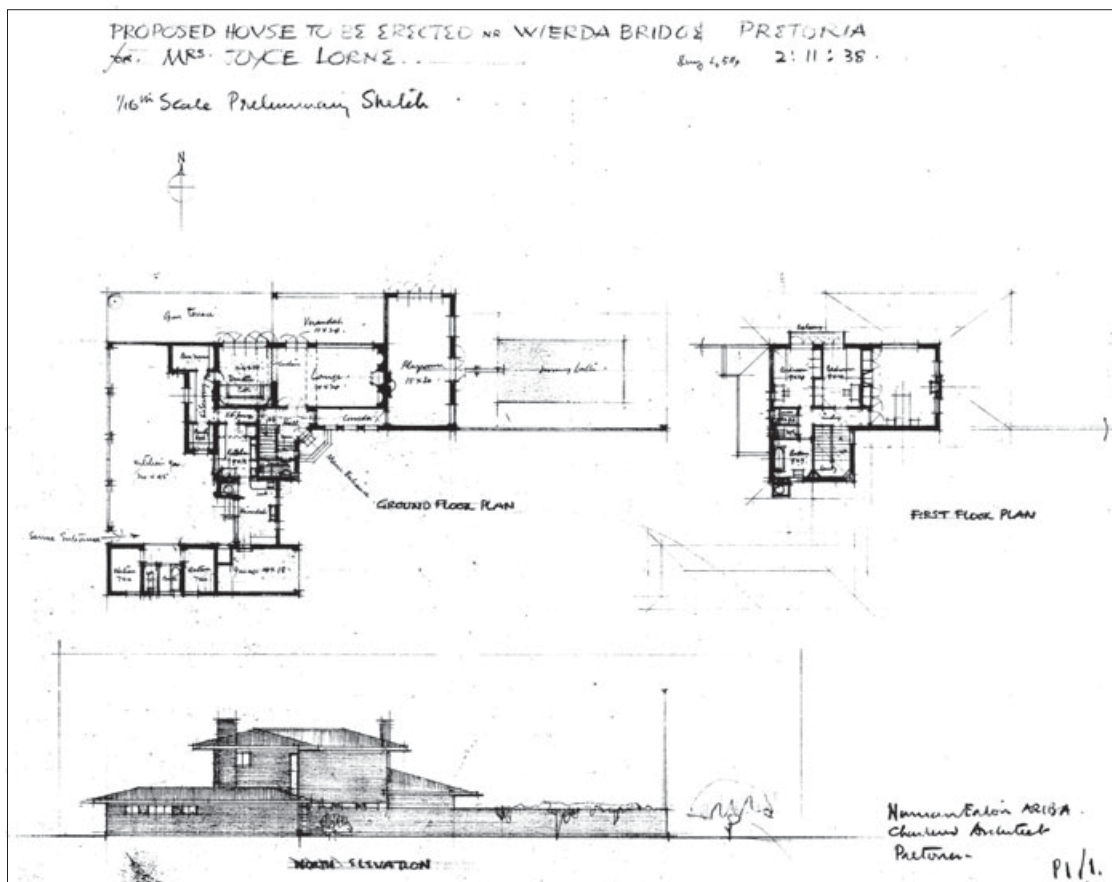
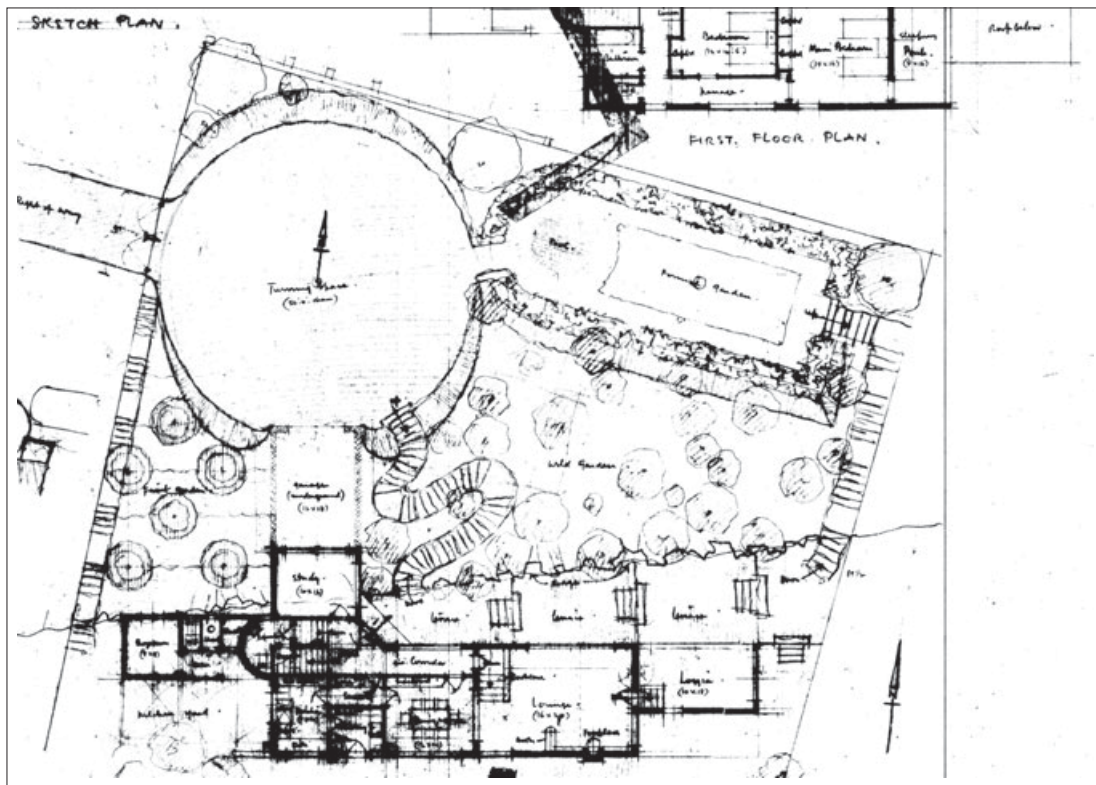


Figure 63 (top): House De Loo*, John Street, Muckleneuk Ridge (1937–1938).

Figure 64 (bottom): House Lorne, Wierda Bridge, Pretoria (1938).

Title House De Loor*

Location John Street, Muckleneuk Ridge, Pretoria

TOPi Reference number(s) 07582

Date(s) as per drawing(s) illegible, but according to Harrop-Allin, 1937–1938

Keywords Residence, Modern Movement, Regionalism, Wright, brick

Signed Norman Eaton ARIBA Chartered Architect

The house was built on a steep, rocky site with views to the north, especially of the Union Buildings along the opposite koppie. Similar to the vocabulary generated in earlier designs, the design for House De Loor is unique as a completely attenuated, linear typology that steps along the contours of the site. An L-shape is used to form the ‘underground’ garage with planted roof on a lower level, so that the rest of the house seems to grow from the site as it steps back and along the contours. Great care was taken in landscaping irregular terraces from the car entrance to the house.

Entrance is along a winding footpath through a ‘wild garden’ and one enters at the corner of the ‘L’ of the plan. A short corridor terminates in semicircular stairs (used for the last time), expressed externally on first floor, leading to the first storey upon entering. To the other side, the corridor terminates again in stairs, which step down with the site to the living room. The open plan is reserved for the dining area that looks down onto the living space.

Eaton used local facebricks of uneven colour, carefully chosen to match the colour of the stone on the site (Frampton, 1975:30–31), which is not evident in the single drawing in the Repository. A low-pitched, hipped roof with generous overhangs protects against the elements.

Architectural masses seem to be ‘imbued with an organic quality’ (*ibid.*:30), establishing a coherence between the natural and the man-made

with strong horizontal focus. As with House Anderssen (1939), the design strikes a chord with Wright’s Lloyd Lewis House (1940), with its long attenuated plan, changes in level, careful consideration of entrance sequence from narrow space to wide-open space and so on.³² While allusions to Wright therefore continue, the De Loor House bears testimony to Eaton’s growing individualism in the sensitive response to site and climate, site-making strategies and considered use of materials.

Along with House Rademeyer (1935), House De Loor was included in Sir Hugh Casson’s review of ‘Modern Architecture in South Africa’ for the *AR* in 1940 (Casson, 1940:42).

Title House Lorne

Location Wierda Bridge, Pretoria

TOPi Reference number(s) 07555

Date(s) as per drawing(s) ‘2.11.38’

Keywords Residence, Modern Movement, Regionalism, Wright

Signed Norman Eaton ARIBA Chartered Architect

Eaton’s designs usually followed a constrained ‘additive approach’, with careful consideration of the disciplined addition of services to create or define outside spaces. In this case, similar to House Cordélie (1935), the house steps diagonally in a seemingly less constrained fashion. A defined exterior space becomes the building perimeter, and seems to be the focus and organizational datum for the house. One enters again at the corner of the overall L-composition – at the crossroads where all activities meet. In fact, entrance is at the very centre of an incomplete rectangular form at the same diagonal previously seen at House Cordélie.

The design device of stepped facade and L-shaped ‘head’ predominates, also recalling the

³² Refer to Motif Sheet 10, Chapter 4.

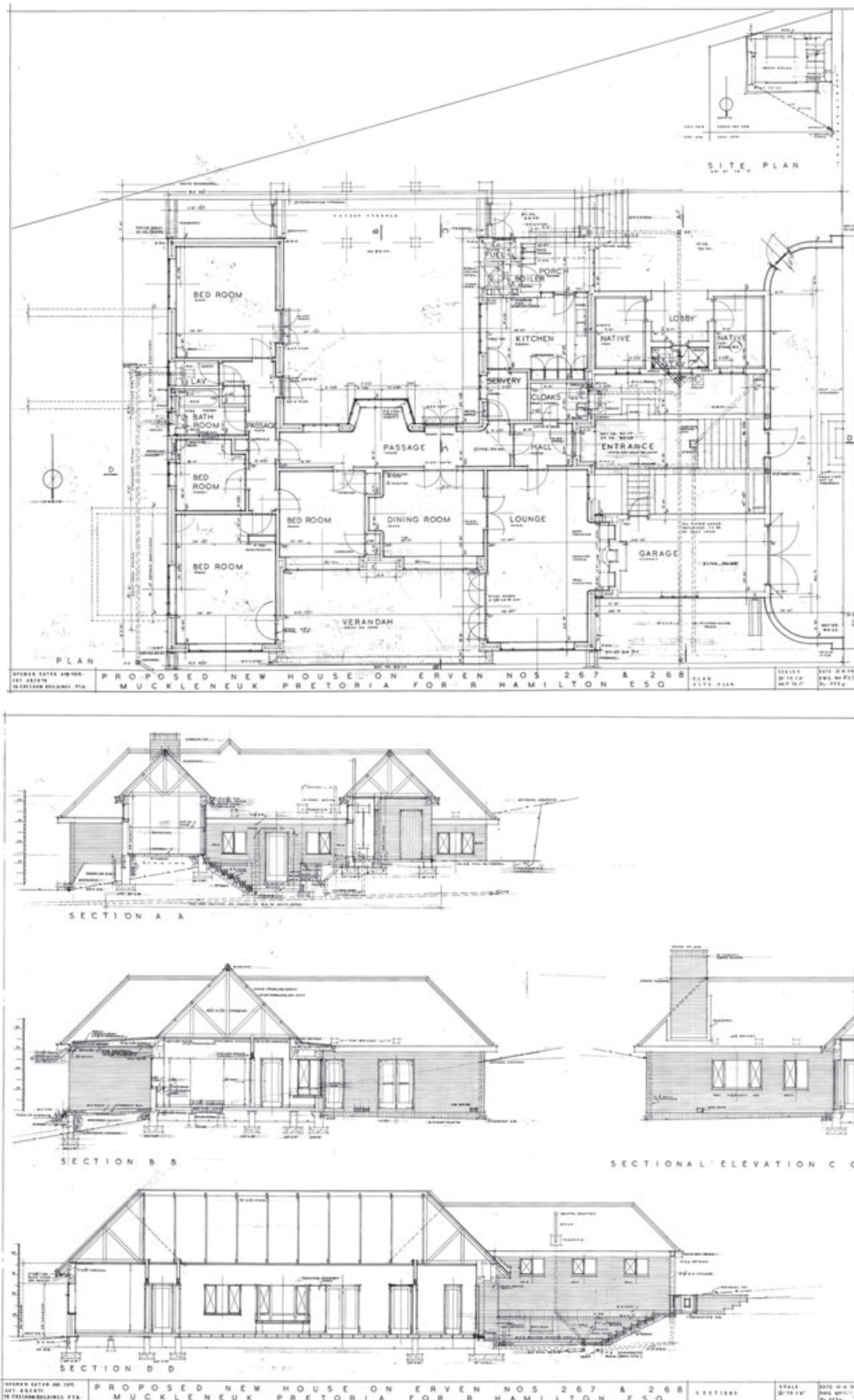


Figure 65: House Hamilton*, Erven 267+8, Loveday Street, Muckleneuk, Pretoria (1939).

earlier House Cordélie and the second design for House Theron. Dining room and living room are uninterrupted spaces, opening onto the northern verandah and terrace. The servant's quarters towards the south and the playroom towards the east seemingly contain the negative spaces.

On elevation one would expect the same 'head' and 'tail' functional zoning – instead, the usual servant spaces are now replaced with the swimming pool. Horizontality is contrasted with the vertical window of the staircase and the two chimneys, which again seem to 'contain' the head of the house.

The overall character, horizontality, vegetation on walls and overhangs of House Lorne all evoke his previous designs with Wrightian impressions; especially the facades of Houses Borckenhagen, Theron and Malherbe come to mind. Again, Eaton uses un-plastered bricks.

Interestingly, Casa Bedo (1936–1937) by Cowin, was published in the November issue of the SAAR (Anon, 1938:428) at the time of the design for House Lorne.

Title Alterations and Additions to House Cullinan*
Location Olifantsfontein
TOPi Reference number(s) 07515
Date(s) as per drawing(s) '5 September 1938'

Keywords Alterations and Additions, existing Residence
Signed Norman Eaton ARIBA Chartered Architect

No drawings included in this document.

1939

Title House Hamilton*
Location Erven 267+8, Loveday Street, Muckleneuk, Pretoria
TOPi Reference number(s) 07525
Date(s) as per drawing(s) '15.4.39'

Keywords Residence, Cape Dutch, Pretoria Regionalism, brick
Signed Norman Eaton and Fair

According to the records in the UP Repository, House Hamilton is the first domestic project undertaken by the new partnership of Norman Eaton & Fair. The design for House Hamilton takes on an H-letter form, with a symmetrical courtyard extension towards the street. One steps down from the street along a flight of stairs into a defined courtyard – a unique design device for Eaton to establish a threshold and sense of arrival. Otherwise the plan recalls his earlier letter-type plans, especially those of Houses von Sonn (1934) and Cooper (1936).

While suggestive of the romantic and organic expression of House van Wouw (1937), House Hamilton is more disciplined and compact. Service spaces articulate the entrance and the corridor again becomes the spine of the organization. Gone are the deep roof overhangs, low-pitched roofs and horizontal strip windows that had started to emerge in the last few years *vis-à-vis* Wright. Along with the future pergola, courtyards, verandahs, and space defining low walls, the Cape Dutch tradition is yet again recalled, while also present are the deep recessed verandahs, and exterior walls of local facebrick ascribed to the so-called 'Pretoria Regionalism' (Fisher, 1998:125).

While horizontal brick course work defines the exterior, Eaton uses brick on edge as surface material for the northern verandah. The house sits pristinely in relation to stepped terraces, making the most of northern views.

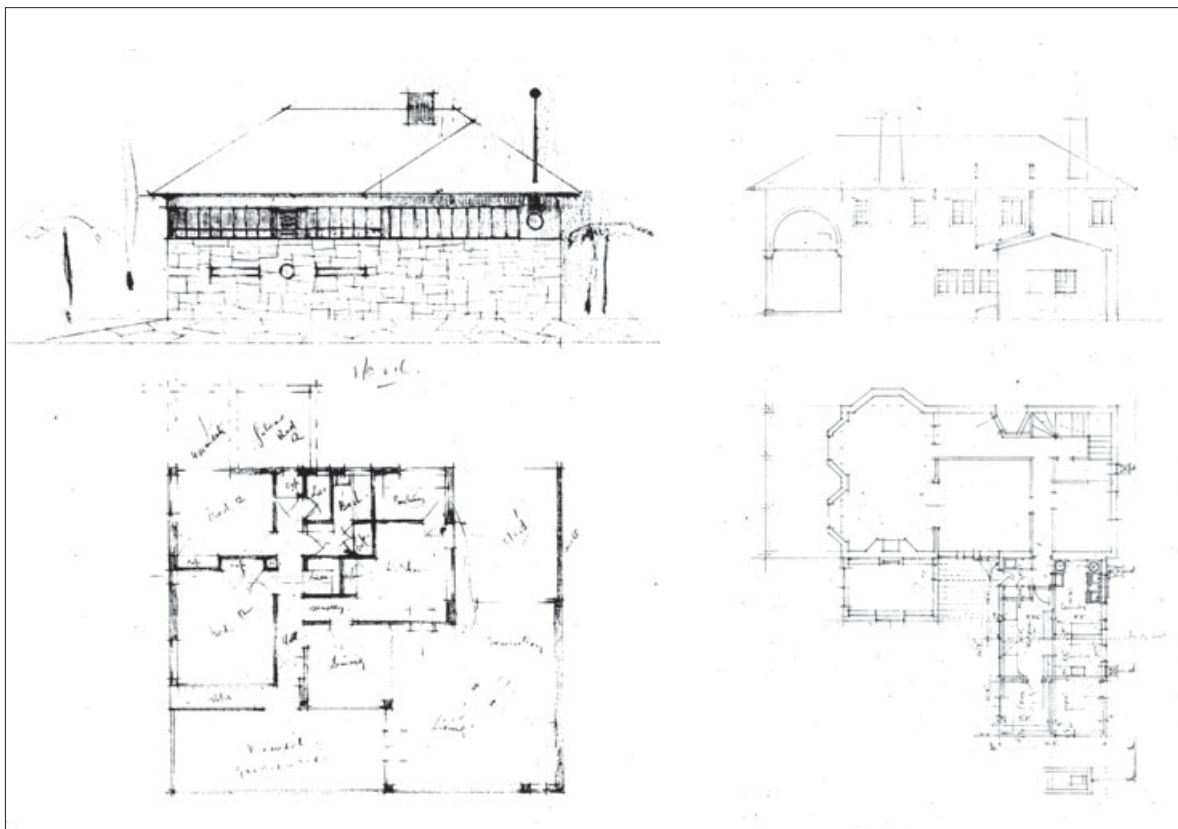
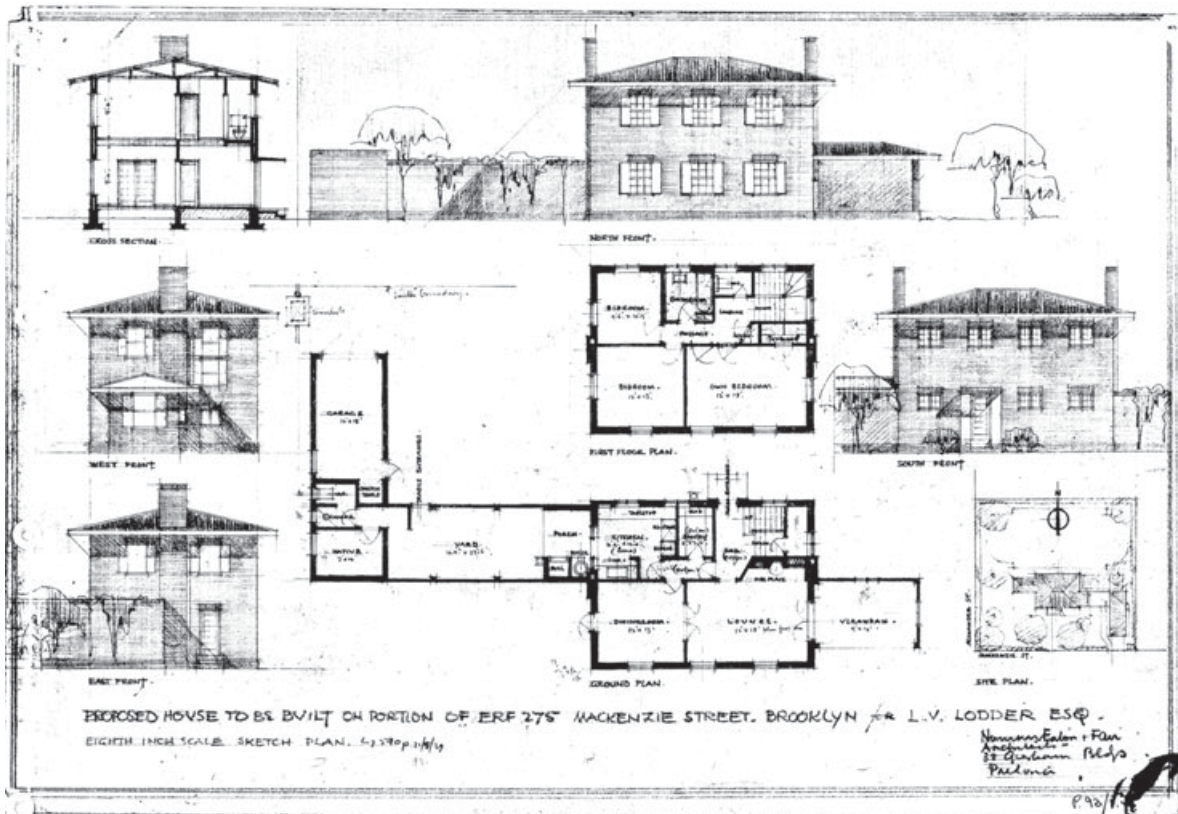


Figure 66 (top): House Lodder*, corner of Alexander and Mackenzie Streets, Brooklyn, Pretoria (1939).
Figure 67 (bottom): Two of the four different proposals for House Cochrane, Johannesburg (1939).

See the later additions in 1949, which take cues from the house as a ‘village’. The house remains in a good condition today, with only minor alterations to the original.

Title House Lodder*

Location Corner of Alexander and Mackenzie Streets, Brooklyn, Pretoria

TOPi Reference number(s) 07735

Date(s) as per drawing(s) ‘21.5.39’

Keywords Residence, Wright, Modern Movement, brick
Signed Norman Eaton and Fair

The ‘head’ and ‘tail’ typology, which can be traced back to the Borckenhagen house (1935), is recalled. Again analogous to Wright’s 1940 Lloyd Lewis House (Laseau, Tice, 1992:108), elements are absorbed in a simplified ensemble. As in previous arrangements, the exterior terrace becomes a spatial organizer – but this time everything is tied together with the central wall as spine. A light, ochre coloured facebrick defines the exterior.

Where the composition had been contained by a built-in seat to one side in the Borckenhagen house, here it is contained by servant space while the low-binding planted wall remains. In fact, the wall thickens out to accommodate services and culminates in the hierarchically defined chimney. Although similar to the plan arrangement in Houses Tosi and Fischer, the wall has now also obtained functional abilities, not just divider of servant and served spaces. The elision of the corridor has been achieved.

Similar to House Fischer, the house has an articulated vertical character – gone are the horizontal strip windows. Instead, windows are vertical and have shutters. The two flanking chimneys contain the cranium of the scheme.

Title House Cochrane

Location Johannesburg

TOPi Reference number(s) 07830

Date(s) as per drawing(s) ‘9.6.39.’

Keywords Residence, Wright, ‘Streamline Moderne’, Richardson

Signed not signed

Eaton had proposed four different schemes for this design – each very different to the previous. One wonders what the requirements of the (no-doubt) irresolute client had been. He had often produced more than one option for a design in the past, but it would always be in a logical sequence. This time, each proposal is disparate. Similar to Bungalow Partridge (1936), a roughly textured stone plinth roots the first proposal to the site. Nautical elements are applied. Functions are compartmentalized asymmetrically. Tripartite division of the facade prevails, with horizontal emphasis on windows in the Wrightian idiom. The roof overhangs are less prominent.

The last proposal is unlike Eaton altogether. In fact, the corner of the house becomes almost Romanesque. Both Wright’s early House McAfee (1894), Kenilworth, Illinois, and House Husser (1899), Chicago, Illinois, come to mind where he was clearly influenced by Richardson’s derisions of residential English planning.

The final design is at odds with the development of Eaton’s work to date. Even though he did not sign the drawings, they are easily recognizable as part of his collection.

Title House Anderssen*

Location Mountain Lane, Pretoria North

TOPi Reference number(s) 07831

Date(s) as per drawing(s) '19.6.1939'

Keywords Residence, timber, Wright, thatch, romanticism

Signed Norman Eaton and Fair

A thatched, timber house for Dr. F. G. Anderssen who had just returned from America in the late 1930s – the only timber house Eaton ever designed. The client's young American wife had influenced the latter decision, yearning for her home country.³³ The first of two houses for the Anderssens, this first house was indeed very different from the later Anderssen House, built in 1949 in the East of Pretoria. The lofty living-room area of this first Anderssen House is similar to the double-volume Studio Van Wouw (1938) and the studio for Alexis Preller, Ygdrasil (1944).

The first time Eaton applied this articulation of hierarchy through the use of double-volume and exposed trusses (similar to Wright), was in the 1932 farmstead for Mr Hill near Lunsklip. A similar demarcation of hierarchy would be applied in other houses, although not a full double volume. On the northern side, the double-volume living space is expressed in a double-height window. A projecting frame protects the opening – recalling House Tosi. Also similar to House Tosi, is the clear demarcation of servant and service spaces – articulated yet again with a spinal wall that ties everything together, yet clearly separates service, and served spaces – similar to his previous linear typologies. A deep, cool verandah directly

³³ Personal communication with current owners, following their meeting years ago with the Anderssen-couple. The current owners, Mr and Mrs Stenekamp have looked after the house devotedly over the years – hence its good condition.

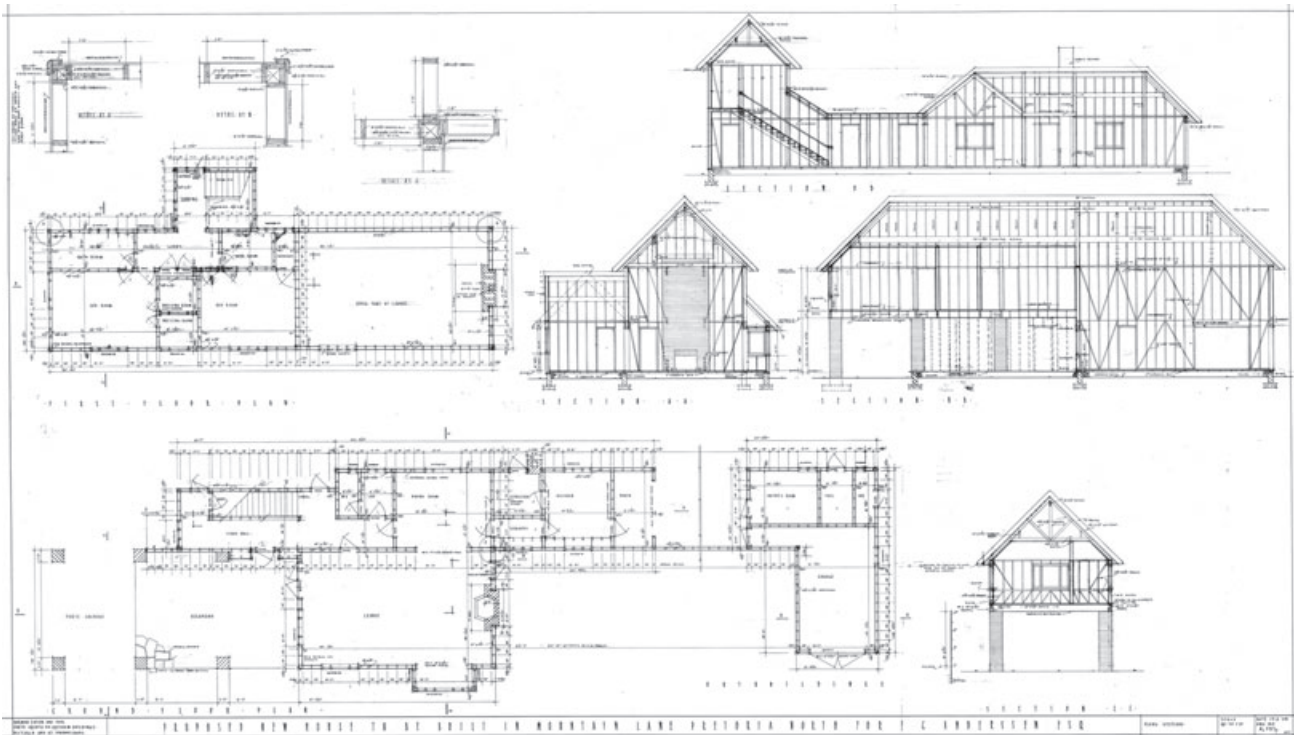


Figure 68: House Anderssen*, Mountain Lane, Pretoria North (1939) was the only timber house Eaton ever did.

under the bedrooms doubles up as both deep entrance threshold and cool refuge in the garden. The entrance to Wright's Lloyd Lewis House (1940) is recalled.

While Eaton was working for Leith, he would have been exposed to the latter's timber and thatch detailing, but Eaton considered his friend Schmickl as the thatched roof specialist in Pretoria (Du Toit, 1989:37). In fact, it is quite difficult to distinguish between the two architects' later thatch houses. Herbert (1969:350) compared the Anderssen House to the Van Wouw House in the sense that both belong to a certain 'romanticism':

[House Anderssen is] ... remarkable for its spacious living-room in which an open-beamed ceiling soars to the full double-storey height of the house. Here as in the van Wouw house, a modern approach to planning is linked to a picturesqueness and an evocation of an older and more stately way of life. In the same romantic mould was the studio, since demolished, which Eaton had designed for Alexis Preller.

Title House Bosman*
Location Hyde Park, Johannesburg
TOPi Reference number(s) None
Date(s) as per drawing(s) None

Keywords Residence
Signed None

While there are no drawings of the house in the UP Repository, it is useful to rely on Clive Chipkin's description of the house in *Johannesburg Style* (1993:287):

Eaton designed a wide-eaved, reticent house – almost a modern colonial bungalow – for the Bosmans in Hyde Park: a generous, com-

fortable family home without that particular African charge that would characterize Eaton in his post-war work.

Title 'Giotto's Hill'* House for Walter Battiss
Location 20th Street, Menlo Park, Pretoria
TOPi Reference number(s) 00627 and 00145
Date(s) as per drawing(s) 1939

Keywords Residence, Battiss, eccentric
Signed None

Much altered, the original design was a modest little house on a hill. According to notes in the TOPi system, the house was only the third house in what is known today as Menlo Park (UP Repository).

Set in a rambling garden, the original design was a simple, whitewashed dwelling with small windows, wooden window shutters and a blue roof. On request of the eccentric client, renowned artist Walter Battiss, the house had to resemble a painting by the medieval artist, Giotto (c. 1267–1337).

In plan, if nothing else, it almost resembles a simplified version of the pinwheel motif of the small prairie house for Isabel Roberts (1908), River Forest, Illinois by Wright.

78 THE NORMAN EATON LEGACY

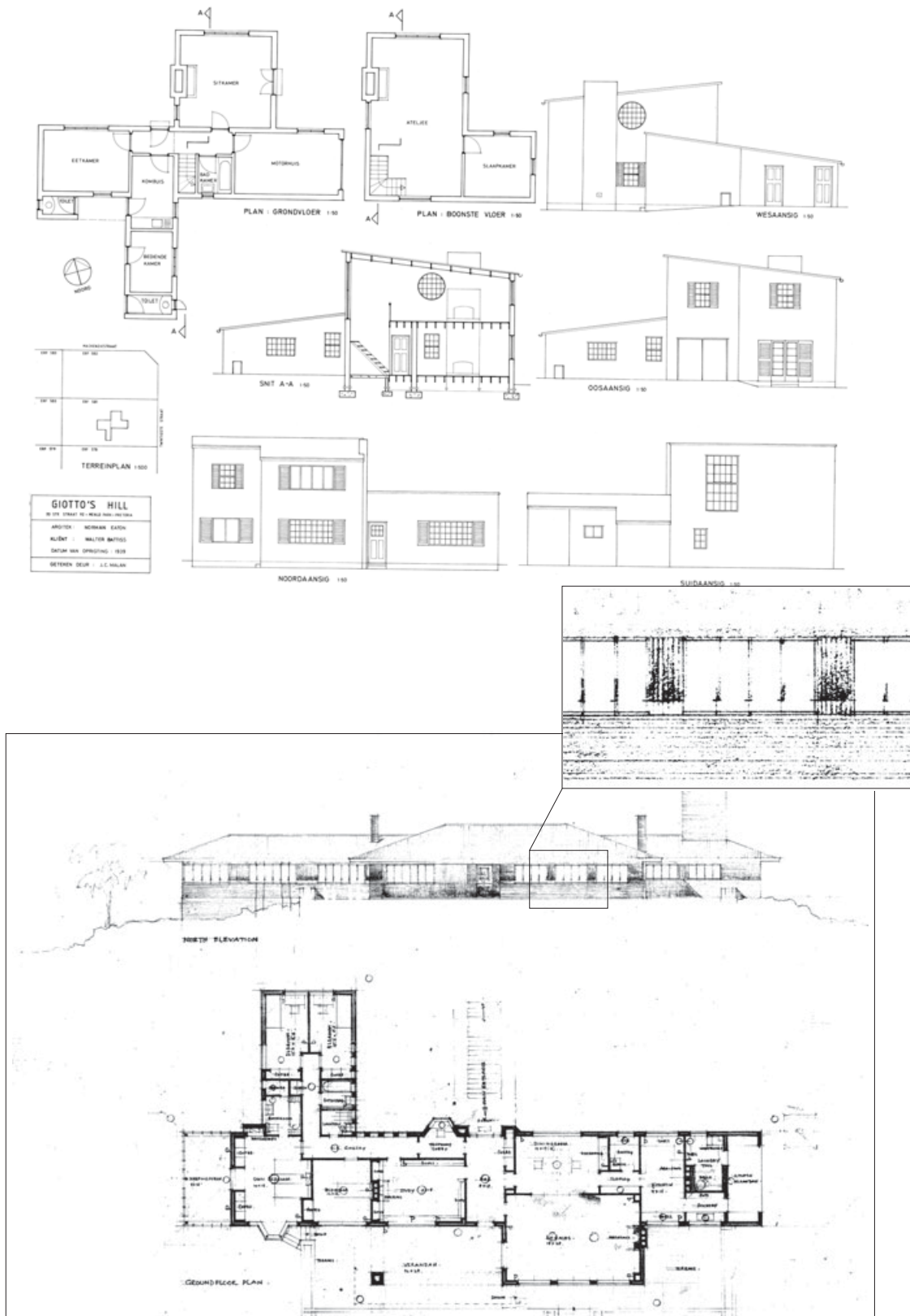


Figure 69 (top): Giotto's Hill*, House for Walter Battiss, 20th Street, Menlo Park, Pretoria (1939). The drawings were recently done by one of the UP architecture students. **Figure 70 (bottom): House van der Merwe***, Derde Poort, Magaliesberg (1940) with alternating brick coursework metaphorically evoking African bead and basket work.

Title House for artist Jacobus Hendrik Pierneef, 'Elangeni'*

Location Elangeni, Brummeria

TOPi Reference number(s) —

Date(s) as per drawing(s) 1939, no drawings

Keywords Residence, Pierneef, National Monument
Signed None

The [place] 'in the sun', Elangeni, was home to Pierneef from 1939 until his death. He had bought 'The Kraal' and built his house and studio against a northern rock ridge and there laid out his garden. Eaton was to lodge at 'The Kraal' for a time and had assisted with the design. According to Fisher (1997:72), his influence on the design:

shows in the innovative use of bluegum poles and split-pole ceilings covered in waterproofing and plastered over – a device used again for constructing the mezzanine floor in Alexis Preller's (1911–1975) studio built at a later date some half a kilometer away.

'The Kraal' was proclaimed a National Monument in 1975 in terms of the then National Monuments Act. The house was documented in 1969, 1986 and 1996 by Wynand Smit. During 2002, students in the landscape architecture programme of the University of Pretoria documented the garden.

1940

Title House van der Merwe*

Location Derde Poort, Magaliesberg

TOPi Reference number(s) 07531

Date(s) as per drawing(s) '15.2.40', '31.3.40'

Keywords Residence, Wright, African textures, brickwork, Critical Regionalism
Signed Norman Eaton and Fair

Similar to House De Loor (1937–1938), the design is a:

fine example of the way in which the plan, architectural forms and the choice and employment of materials were all determined by and evolved as a direct response to the site and surroundings' (Harrop-Allin, 1975:34).

A low-hipped dark grey shingle roof with deep overhangs and a strong horizontal composition once again evoke Wright. Orientated to the koppie, which Eaton had likened to a 'small rugged island set in a sea' (Eaton, 1946:108), the house sits comfortably on the site with an inside-outside connection afforded by deep verandahs and generous terraces. The house blends with its surroundings, with projecting terraces contained by Wrightian plant boxes, providing a subtle transition from the natural to the man-made. Eaton had described the surrounding landscape in terms of 'bigness', 'warmth' and embodying a 'powerful horizontality', all informants to 'grow the plan, architectural shapes and man-made textures and forms that were to become the house' (*ibid.*).

Harrop-Allin (1975:36) describes this house in the same breath as the Van Wouw House in terms of progression towards an 'organic architecture':

Reminiscent – though in a quieter and less dramatic way – of the Prairie houses of Frank Lloyd Wright. The approach and underlying philosophy are the same: Wright's early houses evolved in response to the open prairie of Illinois, Eaton's to the vastness of the Transvaal Highveld.

Eaton again employed his architectural strategy for the horizontal demarcation of public from private as he had done in Houses Theron (unbuilt 1936) and Malherbe (1937), where the entrance porch separates the two zones and a corridor services the various rooms.

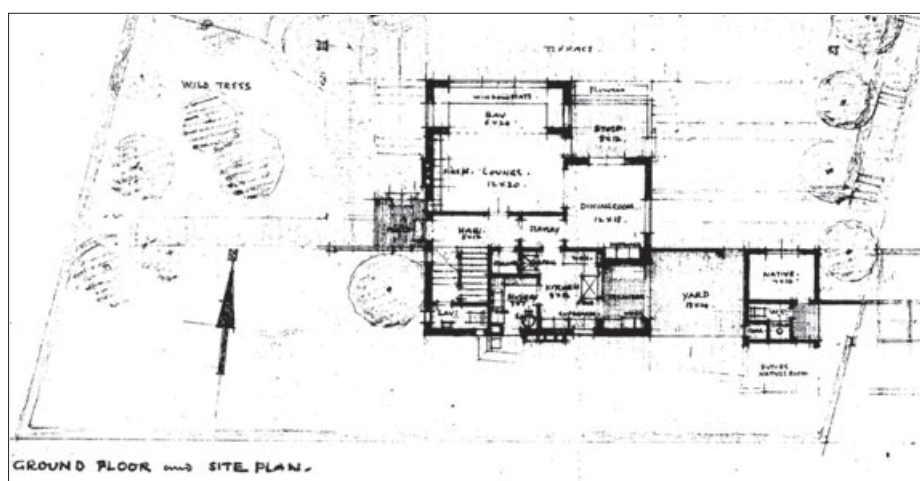
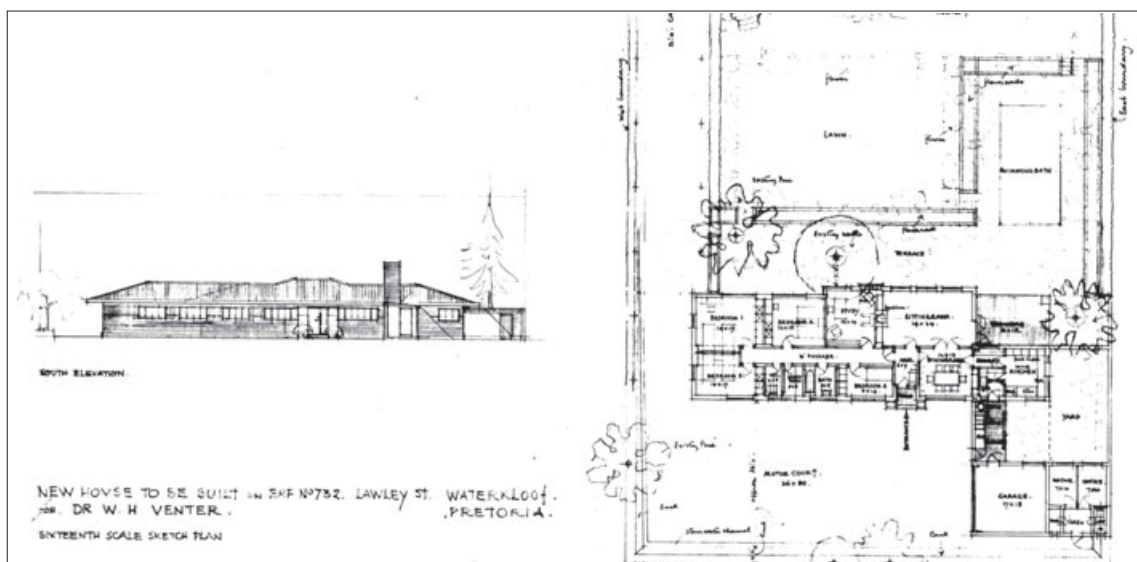


Figure 71 (top): House Eybers, Menlo Park, Pretoria (1940). Figure 72 (middle): House Venter, Lawley Street, Waterkloof (1940), replica of House Eybers. Figure 73 (bottom): House Neethling*, Corner of John and H.A. De Loor Streets, Muckleneuk, Pretoria (1940).

The initial design, dated '15.2.40', is a simpler, more attenuated version of the final sketch plans, dated '31.3.40'. The major differences are in a simplified, more disciplined plan with kitchen yard, an alternative bedroom arrangement, and the addition of small projecting bay windows in the final plan.

Facebrick is used in all exterior walls, resembling as closely as possible the colour and texture of the indigenous rock of the site (*ibid.*:36). Significantly, the regularity of the brick courses is broken between the windows by panels of vertical patterning, already manifest in his design proposal – a conscious attempt by Eaton to 'bear in mind the simple effects in indigenous Bantu bead and basket work' (Eaton, 1946:110).

This seems to be the first conscious attempt to evoke African texture in his domestic work, before the manifestation of such renderings in his non-residential work.

In Johannesburg, Martienssen's own house had just been completed as the highlight and symbol of the first Modern Movement in South Africa.

Title House Eybers

Location Menlo Park, Pretoria

TOPi Reference number(s) 07574

Date(s) as per drawing(s) '17.5.40'

Keywords Residence, Wright

Signed Norman Eaton & Fair Architects

Employing the same spatial scheme as in his other single-storey designs, such as for Houses Theron (unbuilt 1936), Malherbe (1937) and Van der Merwe, the plan is adapted to accommodate the boundaries of the site whilst aligning with the contours of the koppie.

Outside spaces are defined with landscaping, or the careful placement of service functions, connected with binding walls. Similar to his previous single-storey schemes, horizontality is em-

phasized with deep roof-overhangs, horizontal strip windows and brick coursework. The open plan is again reserved for living spaces, with views onto the terraced garden.

Title House Venter

Location Lawley Street, Waterkloof, Pretoria

TOPi Reference number(s) 07510

Date(s) as per drawing(s) '20.11.40'

Keywords Residence, Wright

Signed Norman Eaton & Fair Architects

Set back from the street, House Venter is the exact replica of House Eybers, designed earlier in the same year on another site. The house opens to the north onto a generous terrace, contained with planter boxes.

Title House Neethling*

Location Corner of John and H.A. De Loor Streets, Muckleneuk, Pretoria

TOPi Reference number(s) 07745

Date(s) as per drawing(s) '22.05.40'

Keywords Residence, Wright, brick

Signed Norman Eaton & Fair Architects

According to Harrop-Allin (1975:37), Mr C.W. Neethling had bought the property adjoining the De Loor House (1938) and was so impressed with the design of the latter that he commissioned Eaton to produce something similar. While the house resembles its neighbour in choice and handling of materials, deep overhangs and site binding strategies, it is a far more compact, simple double-storey box.

Similar to Houses Tosi (1937), Fischer (1937) and Anderssen (1939), a wall acts as both dividing (internally) and binding (externally) element. Eaton had aligned the defining wall with that of adjacent House De Loor, so that the two schemes were originally visually linked. Internally, the wall

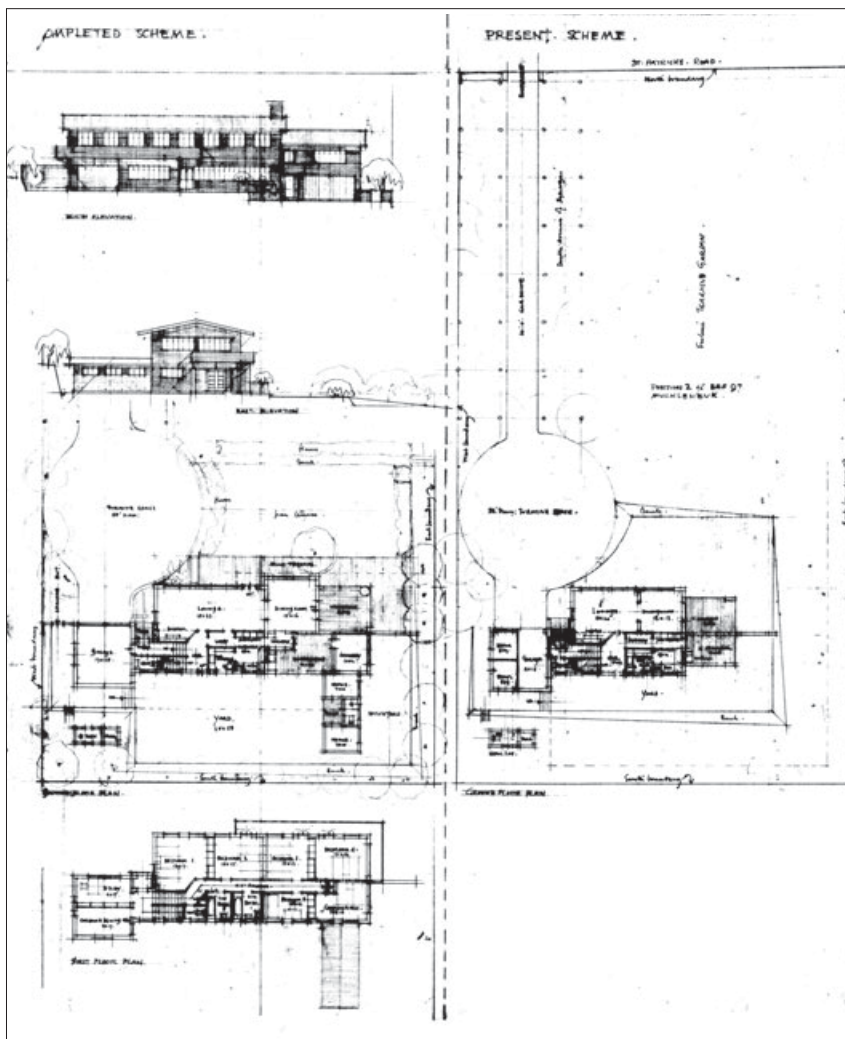
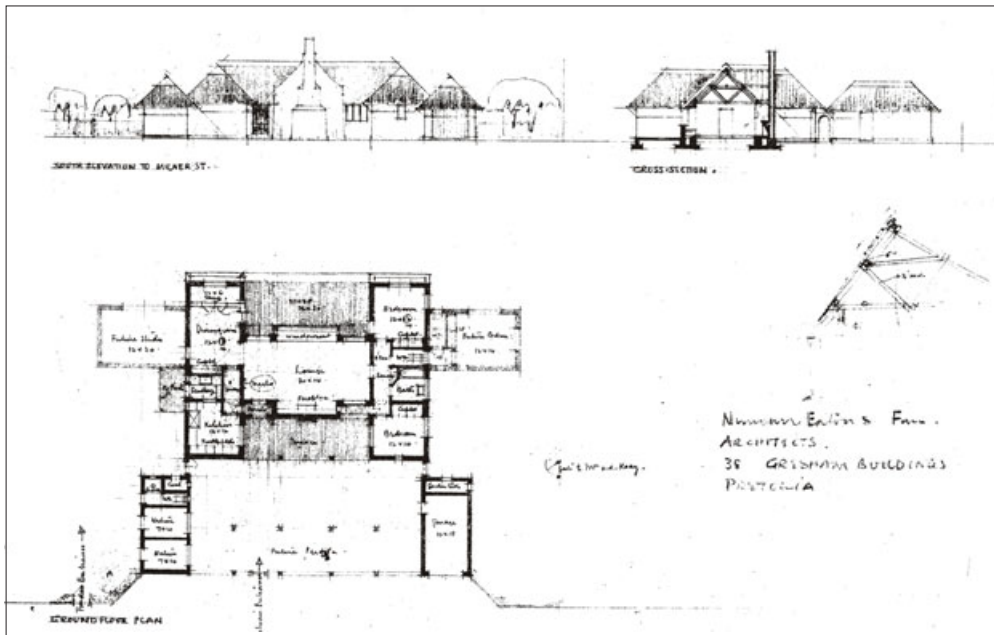


Figure 74 (top): Cottage Teichman, Milner Street, Waterkloof, Pretoria (1940).

Figure 75 (bottom): House for Adv. Franz Boshoff, St Patrick's Street, Muckleneuk, Pretoria (1940).

became the main divider of service and served spaces.

While the De Loor House bears some resemblance to Wright's Lloyd Lewis House (1940), the Neethling House would probably be more closely aligned with the diagrammatic scheme associated with House Coonley (1907). Both comparisons capture the landscape in the form of exterior spaces partially enclosed by building elements. The living, dining, and associated kitchen workspace occupy the 'head' of the compositions. While Wright used the 'tail' for bedrooms, accessed by 'gallery corridors' (Laseau, Tice, 1992: 108), Eaton employs the 'tail' to make up servants' quarters and general servant spaces. In the De Loor and Lloyd Lewis Houses, these take on an elongated formal composition; while the Neethling and Coonley Houses are more compact.³⁴

Title Cottage Teichman

Location Milner Street, Waterkloof, Pretoria

TOPi Reference number(s) 07565

Date(s) as per drawing(s) '28.5.40'

Keywords Cottage, Cape Dutch, *rondawelhuis*, *Afrikaanse woning*, African settlement, thatch, symmetrical, gum-pole, Pretoria Regionalism

Signed Norman Eaton & Fair Architects

Symmetrical and regimented, the design is reminiscent of earlier cottage designs, especially the Laurels Cottage (1930). However, this time a series of 'huts' define various pockets of space – almost like a small village. The notion of the house as a village is perpetuated in his later Greenwood Village, which consciously evokes African morphology. Also, compare this house to the more informally arranged house and studio for Esias Bosch (1961) in Witrivier.

Gerard Moerdyk discussed the arrangement of *rondawelhuis* in the *Die Boerevrou* (December 1921; 1989:18–19) where he suggested a

similar arrangement for rondavels, literally to evoke an African settlement.³⁵ Eaton seemed to have used the gum-pole for the first time – a small detail *vignette* suggests gum-pole detailing for the roof construction.

Title House for Advocate Franz Boshoff

Location St Patrick Street, Muckleneuk, Pretoria

TOPi Reference number(s) 07746

Date(s) as per drawing(s) '30th October 1940'

Keywords Residence, Wright, facebrick, phased scheme

Signed Norman Eaton & Fair Architects

The design of the house, to be built in phases, is set back from the street with terraced gardens in between. Almost exactly like House Fischer (1938), it takes on more generous proportions in the U-shape with the typical arrangement of living spaces to the north and a verandah on the northeastern corner. The house lacks the balance in horizontal and vertical articulation of House Fischer, but in plan the scheme is otherwise the same.

³⁴ Refer to Motif Sheets 9 and 10, Chapter 4.

³⁵ See the article as re-published in *Die Afrikaanse woning* (Fisher, Le Roux, 1989:13–15) and Motif Sheet 8, Chapter 4.

3.2. 1941–1945 The War Period

Building controls were gazetted in July 1941 and remained in force until 1946. Restrictions were placed on skilled labour and materials such as steel, electrical conduits and corrugated iron. As a result, locally available thatch became the accepted roofing material, resulting in attenuated building plans. Peters speculated that walls were bagged perhaps due to the restriction on skilled labour (Peters in Fisher *et al*, 1998:177).

If the information in the UP Repository is correct, Eaton's very first trip into the African continent, besides his earlier travels to Egypt, was in 1941. Most significantly, he would travel to the Americas for an extensive study tour during 1945 where he would end up meeting three of six of the world's most influential contemporary architects of the time: Niemeyer, Wright and Van der Rohe.³⁶

Houses from this period all hail a 'romantic' spirit, in contrast to Eaton's more rigid, formal approaches to non-residential work, often set within the modern idiom.

There are only ten residential projects in the UP Repository from this period, including a small house that Eaton had designed for himself in 1944 and also on residential scale, Ydragsil, the studio designed for his friend Alexis Preller. Notably, two of the houses from this period were built in Johannesburg, one in Naboomspruit, two on farms and the rest in and around Pretoria. House Connell O'C Maggs, arguably the best house from this period, would be the last house for a few years.

There are thirteen non-residential projects in the UP Repository from this period, including the unrealized Ministry of Transport project. The design for the Ministry of Transport was the first South African one in the modern idiom for a civic client and the first to be influenced directly by the new Brazilian architecture. The remainder of the four Land Banks designed across the coun-

try were all completed during this time, with the one in Potchefstroom (1941) having the richest spatial composition. The latter was also possibly the first non-residential work where Eaton used extensive surface detailing with faggots consciously recalling African textures.

1941

Title Homestead Warren*

Location At farm 'Timaloo' near Pietpotgietersrust, Transvaal (current-day Mokopane, Limpopo Province)

TOPi Reference number(s) 07572

Date(s) as per drawing(s) '1:12:41'

Keywords Residential, Cape Dutch influences, Arts and Crafts, critical regionalism, climatically responsive, Leith, Moerdyk, *Afrikaanse woonhuis* [Afrikaans home]

Signed Norman Eaton & Fair Architects

Homestead Warren was perhaps the first of the houses dating from this war-period that would reflect the restrictions in the building industry. However, similar to Eaton's previous homes on farms, it resembles his interpretation of the *Afrikaanse woonhuis* as seen in for example Farmstead Hill (1932).

The plan is a traditional H-lettertype that roughly aligns with the position of a large existing tree. In his previous schemes such as for example the Laurels Cottage (c. 1930), Homestead Cooper (1937), or Cottage Teichman (1940), the living room is at the centre of the roughly symmetrical scheme and aligned from east to west to gain both northern and southern exposure. By contrast, the design for Homestead Warren takes on a linearity and asymmetry to make the best of northern exposure. The result is that less of the focus of the house is on the usual central

³⁶ The other three were Gropius, Aalto and of course Le Corbusier (Gerneke in Fisher *et al*, 1998:212).

livingroom, and is rather around the framed outside space that opens onto the veld beyond. In fact, the central hallway simply becomes a spatial divider of living zone and bedroom zone, while it provides a sense of arrival not unlike that of House Hamilton (1939).

The swimming pool is carefully aligned with the overall discipline of the layout. Terraces and binding wall accommodate the transition from natural to man-made. The stepped layout allows for views over the veld beyond the lower terraces and swimmingpool.

The design is again reminiscent of Moerdyk's *huis vir 'n warm distrik* [house for a warm district] as published in *Die Boerevrou*³⁷ (Fisher & Le Roux, 1924; 1989:33). Homestead Warren is stripped of ornamentation, and is a simple, noble home that establishes a relationship with nature through a series of simple thresholds.

1943

Title Nuwe Plaaswoning vir Mnr Koos Buys [New Farmstead for Mr Koos Buys]

Location Op die plaas Uitgevallen, Vereeniging (present-day Gauteng)

TOPi Reference number(s) 07520

Date(s) as per drawing(s) '25.1.43'

Keywords Residential, Cape Dutch influences, Arts and Crafts, critical regionalism, climatically responsive, Leith, Moerdyk, *Afrikaanse woonhuis* [Afrikaans home]

Signed Norman Eaton & Fair Argitekte

Contrasting the more disciplined plan of Homestead Warren (1941), the house for Koos Buys repeatedly steps in and out to accentuate internal functions. Verandah and stoep thus step out, complete with Cape Dutch built-in seats. A Cape Dutch-styled gable accentuates the end of the axis established by the tree lane, also in the Cape Dutch manner. The house encloses a *binneplaas* [courtyard], complemented with surface tiles.

37 Refer to Motif Sheet 1, Chapter 4.

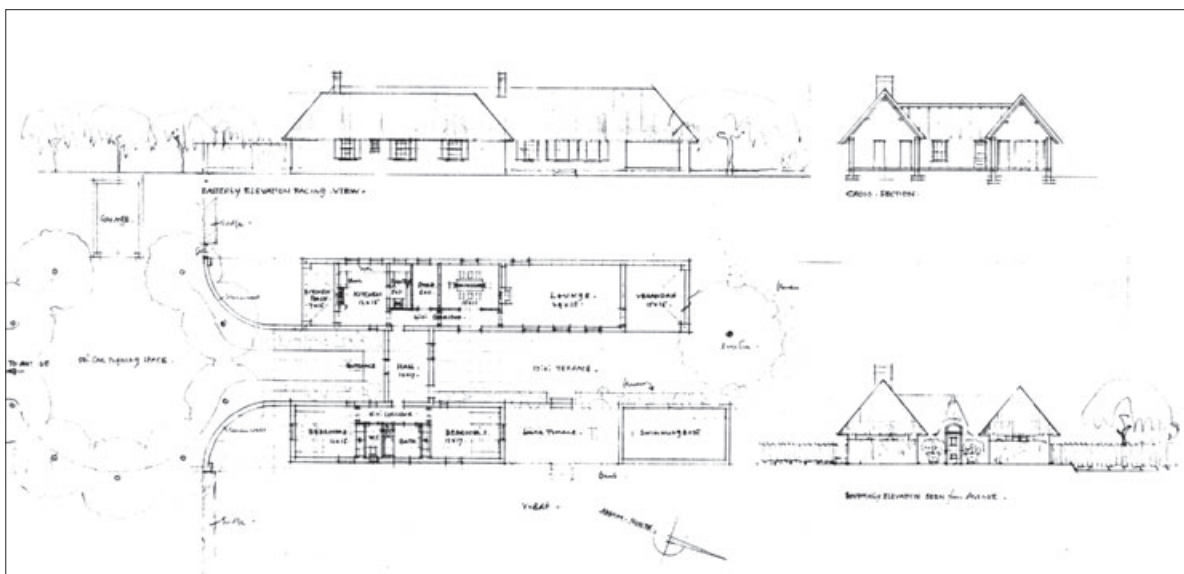


Figure 76: Homestead Warren*, at farm 'Timaloo' near Pietpotgietersrust (1941).

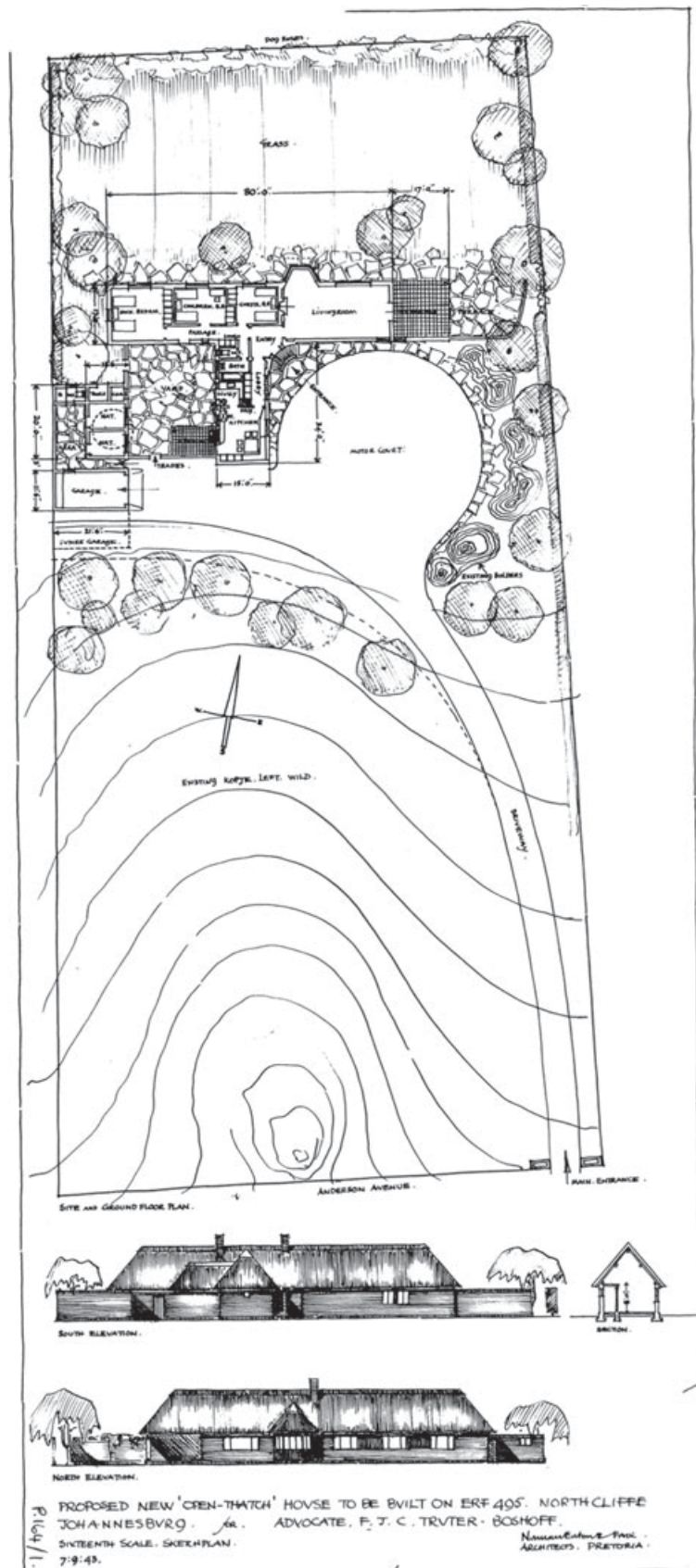


Figure 77: House Truter-Boshoff*, Erf 495, Anderson Avenue, Northcliff, Johannesburg (1943).

Title House Drakensberg

Location Erf 69, Corner of Boshoff and Veale Streets, Nieuw Muckleneuk, Pretoria

TOPi Reference number(s) 07519

Date(s) as per drawing(s) '5.5.43'

Keywords Residential, Pretoria Regionalism, facebrick, thatch, Wright

Signed Norman Eaton & Fair Architects

Although the theme of 'head' and 'tail' is still prevalent in plan, it is expressed quite differently in the zoning and massing of the house. The L-shaped plan has now been elongated, probably because of the thatch roofing material. Similar to House Anderssen (1939), the thatched roof is combined with the modern plan as opposed to conventional letter-types.

Although there is no section to confirm, the living space seems to be higher than other spaces, probably with exposed trusses – enabled by the fact that bedrooms are not directly above. Because of this, the house has a strong horizontal character, enhanced by the extended binding site walls.

Care was taken to articulate various textures defining outside spaces, such as the slate 'crazy paving' that extends into the garden. In fact, the local Pelindaba slate used rough or cut was raised to respectability during the war years (Fisher *et al*, 1998:134). In addition, the over-fired and mis-formed brick also became fashionable during this time through its use by Eaton and Schmickl, who was now 'his backroom boy' in Velra House (Fisher, 1997:79).

Title House Truter-Boshoff*

Location Erf 495, Anderson Avenue, Northcliff, Johannesburg

TOPi Reference number(s) 07518

Date(s) as per drawing(s) '7.9.43.'

Keywords Residential, Regionalism, facebrick, thatch, Wright

Signed Norman Eaton & Fair Architects

The plan for House Drakensberg had only been slightly tempered to allow additional bedrooms on ground level, resulting in a one-storey T-type configuration that also resonates with Cape Dutch letter-type plans. The latter is again the result of the thatched roof – Eaton referred to the house as an 'open-thatch' house.

Entrance is at a diagonal at the junction of the elongated T-shape, articulated with a fan-like stair of brick-on-edge. A Wrightian baywindow projects asymmetrically towards the north from the living room. Again, care has been taken to articulate various textures defining outside spaces, such as the Pelindaba slate for the yards and terraces of the house. The house is carefully sited to the north of koppie 'left wild'.

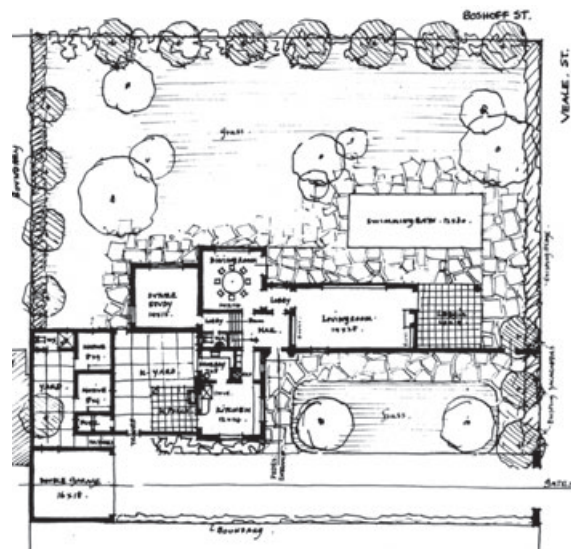


Figure 78: House Drakensberg, cor. Boshoff and Veale Streets, Nieuw Muckleneuk, Pretoria (1943).

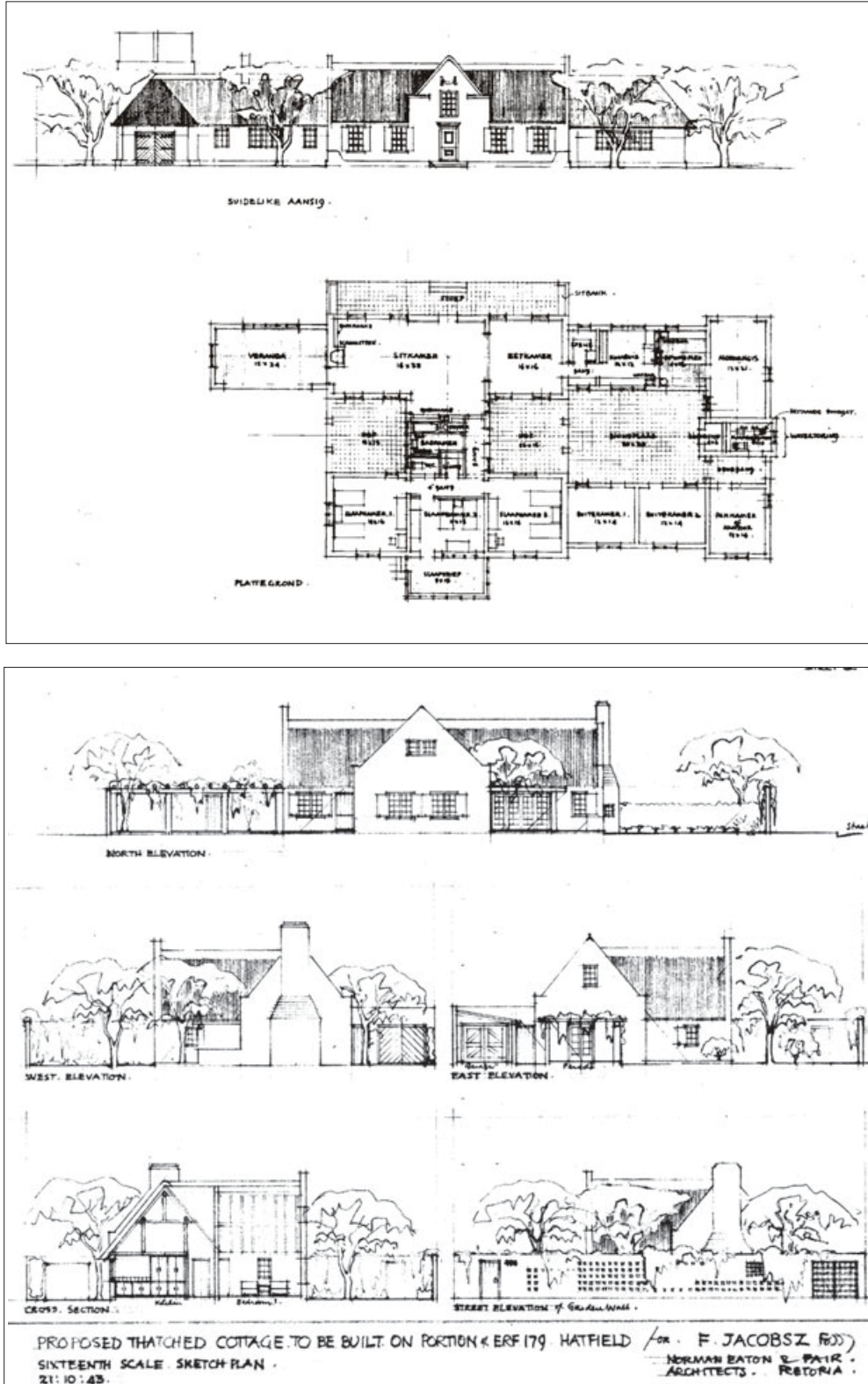


Figure 79 (top): Farmstead Buys, Uitgevallen, Vereeniging (1943).

Figure 80 (bottom): Cottage Jacobsz*, 494 Hilda Street, Hatfield, Pretoria (1943).

Title Cottage Jacobsz*

Location 494 Hilda Street, Hatfield, Pretoria

TOPi Reference number(s) 07576

Date(s) as per drawing(s) '21.10.43'

Title House Tindall

Location Atholl, Illovo, Johannesburg

TOPi Reference number(s) 07860

Date(s) as per drawing(s) '5.11.43'

Keywords Residential, Regionalism, facebrick, thatch, Wright

Signed Norman Eaton & Fair Architects

Keywords Residential, Regionalism, facebrick, thatch, Wright, African village

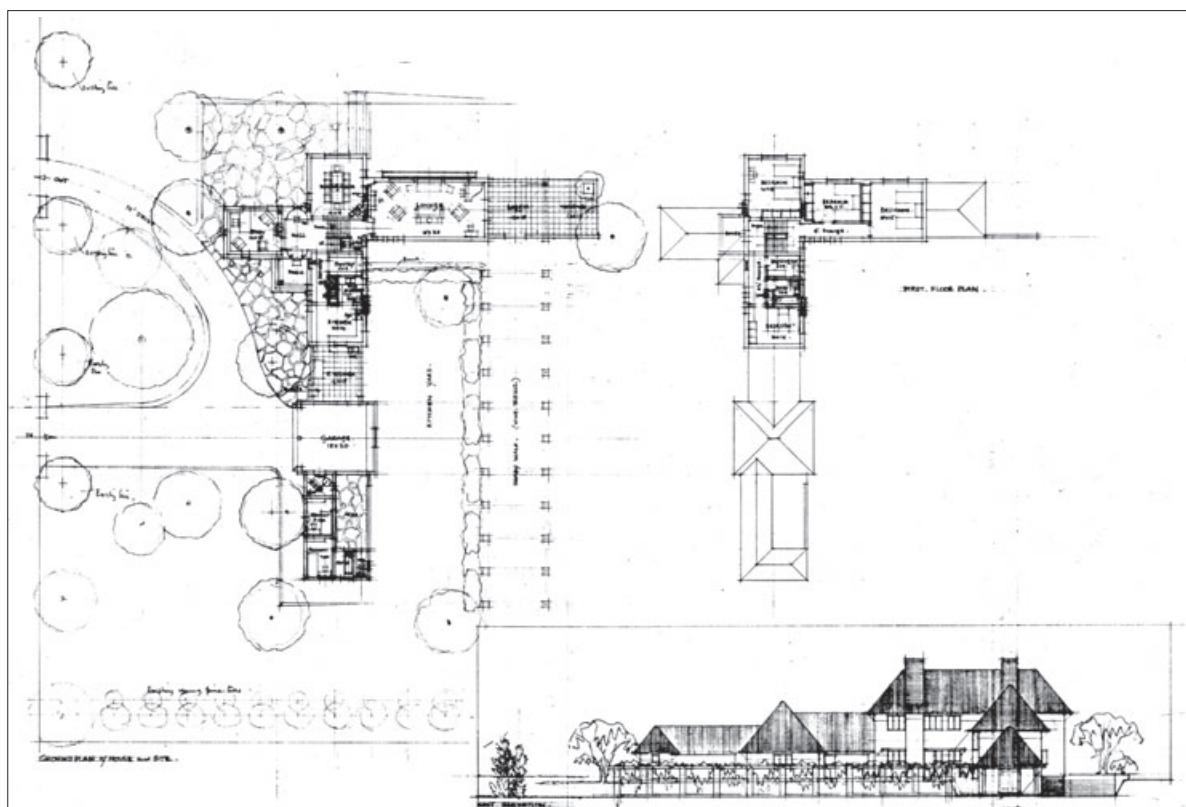
Signed Norman Eaton & Fair Architects

A simple thatched cottage oriented east-west with spaces defined with slate paving. Gables, pergolas, shutters and articulation of windows all draw strongly from the Cape Dutch. A lot of attention was given to landscaping elements, trees are marked and a low wall with square patterning holds everything together.

This design combines the organic Wrightian relationship to site and horizontality, refers to the traditional cottage, while simultaneously alluding to the idea of the house as a 'village', especially expressed in the repetitive stepped roof motif. The design is reminiscent of Moerdyk's *rondawelhuis* in *Die Boerevrou* (December 1921; 1989:18–19) evocative of an African settlement.

While similar to the schemes for Houses Drakensberg and Truter-Boshoff, House Tindall takes on more complexities in stepped levels to accommodate the sloping site. The kitchen yard is defined magnificently with a vine balustrade along the full length of the house.

Figure 81: House Tindall, Atholl, Illovo, Johannesburg (1943).



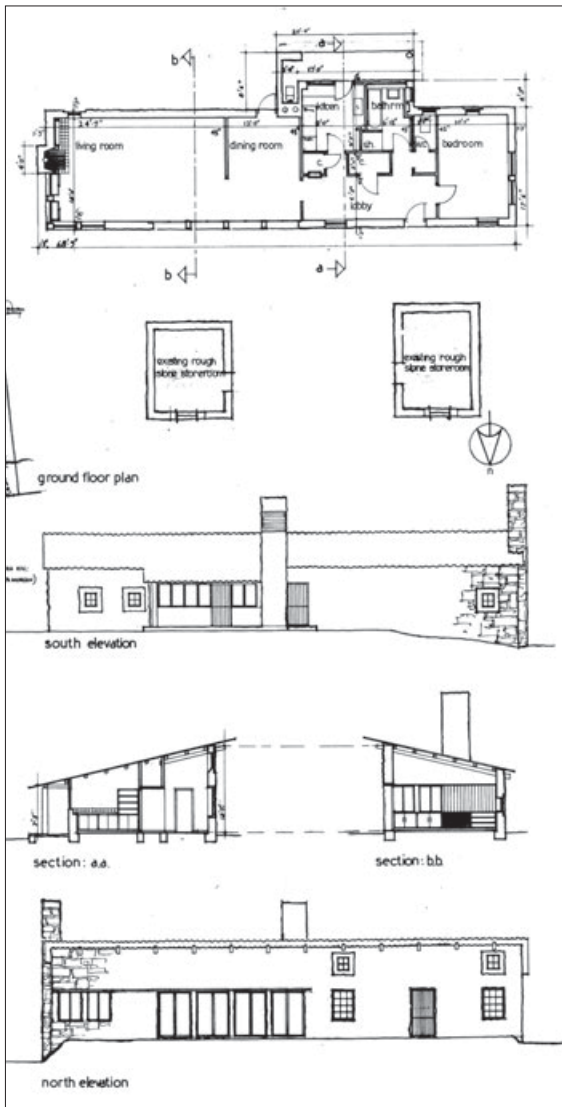
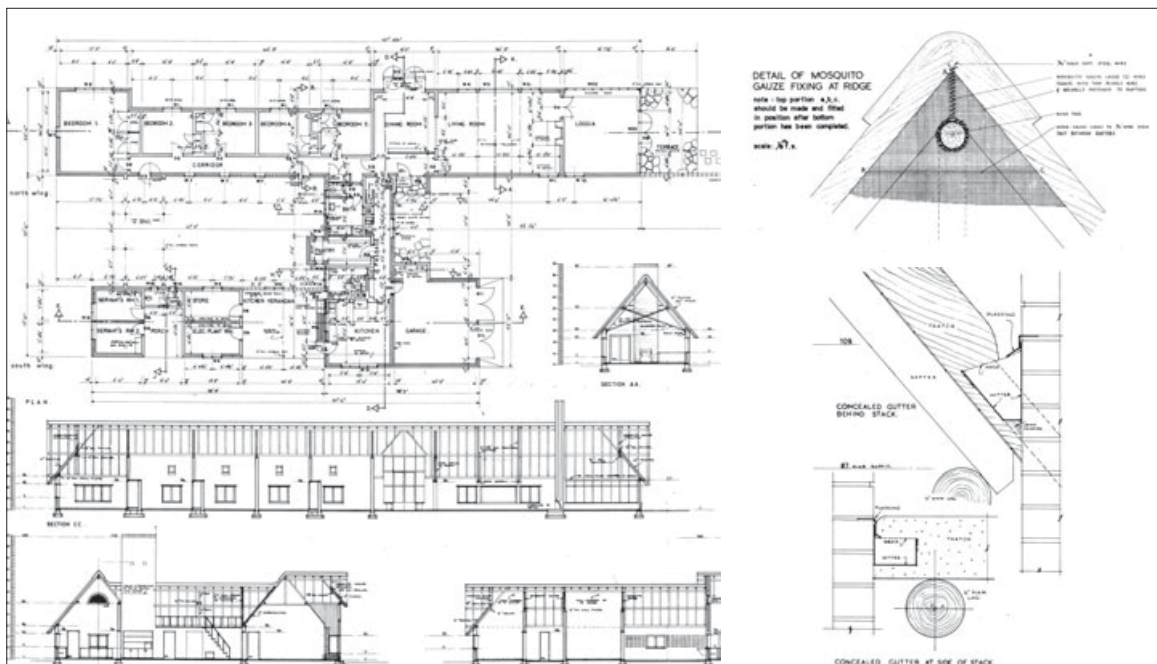


Figure 82 (left): Farm House Eaton, on portion of Farm Garstfontein, Pretoria District (1944). **Figure 83 (above): Photograph of Ygdrasil***, Studio for artist Alexis Preller (c. 1944).

Figure 84 (below): House Connell O’C. Maggs*, Somerset Estates, Naboomspruit (1945), present-day Mookgophong, Limpopo Province. **Figure 85 (on the next spread): Also of House Connell O’C. Maggs***.



1944

Title Proposed Farm House for N.M. Eaton
Location On portion of Farm Garstfontein 428, District of Pretoria
TOPi Reference number(s) 07749
Date(s) as per drawing(s) '21-6-44'

Keywords Residential, Regionalism, stone, pioneer house
Signed Not signed

Unlike the architectural statements made by his peers (e.g. McIntosh, Martienssen, Stauch, Cowin) in building houses for themselves, Eaton's house is a humble pioneer-like rectilinear stone house on the (then) outskirts of Pretoria with meticulous drawings showing the layout of the proposed vineyards and olive trees. The house is placed carefully in relation to two existing rectangular structures which announce the entrance space and could easily have appeared in *Die Boerevrou*.

Title Ygdrasil*
Location Pretoria
TOPi Reference number(s) none
Date(s) as per drawing(s) c. 1944

Keywords Studio, Pretoria Regionalism, Romantic, thatch, bluegum poles, Preller
Signed not applicable

Ydrasil was the studio for artist and friend, Alexis Preller. Artists were among Eaton's treasured inner circle of friends. While he had designed Van Wouw's house and studio (1938), he had also assisted with inputs towards Pierneef's house in Brummeria. Bluegum poles and plastered split-pole ceilings were innovatively also used in the design for the mezzanine floor in Preller's studio. No drawings were found in the Repository, but Ydrasil takes on the double-volume studio space similar to that of the Luns-klip farmstead (1932), the Van Wouw Studio and

also in the first Anderssen House (1939). Harrop-Allin describes this studio as being from the same 'romantic' mould that shaped Studio Van Wouw and the Anderssen house (1975:37). House Connell O'C Maggs (1945) probably also fits that description.

Ydrasil has since been demolished. Eaton later designed 'Dombeya', a house for Preller in the Hartebeespoort area, sometime in the 1960s.³⁸

1945

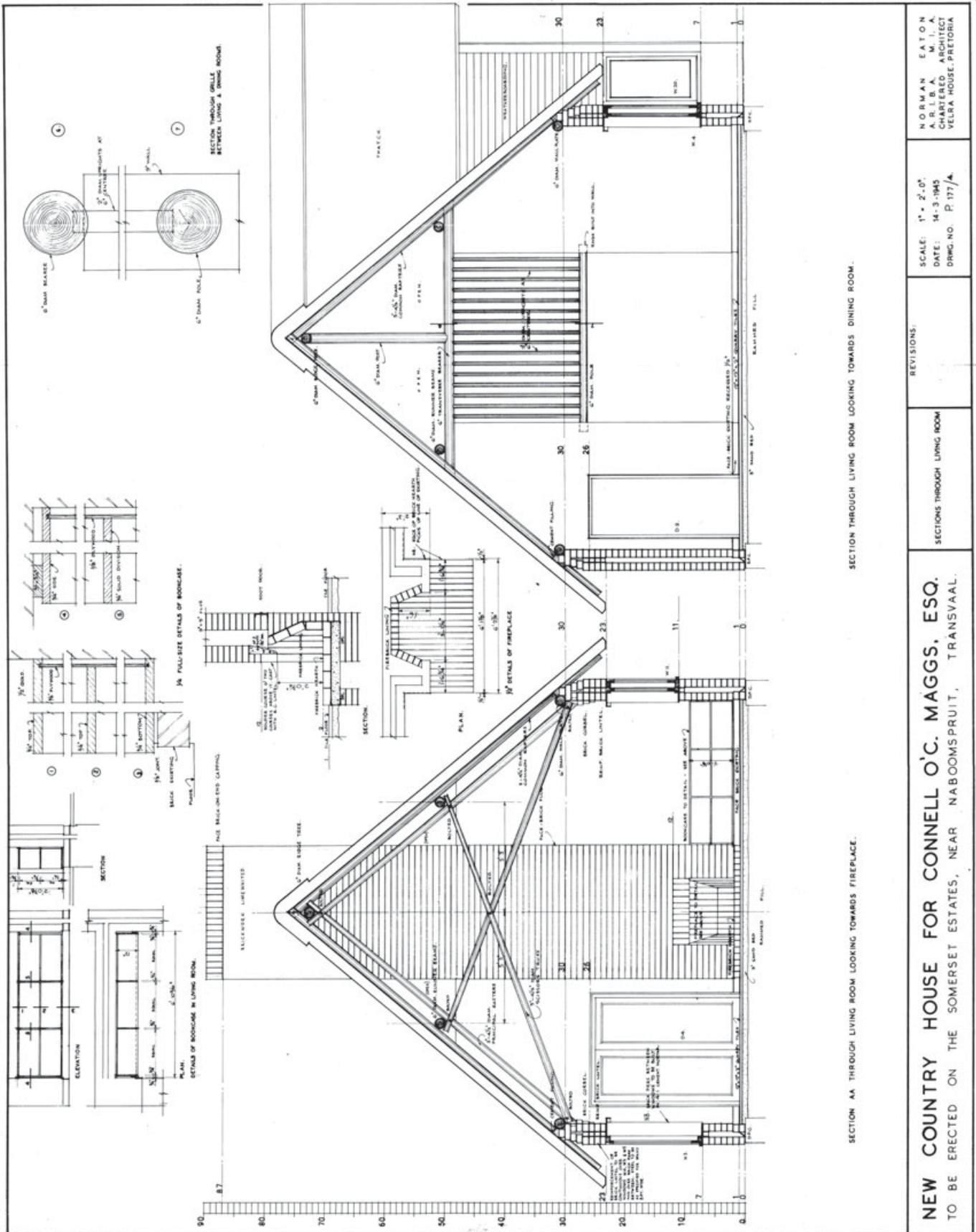
Title New Country House Connell O'C. Maggs*
Location Somerset Estates, near Naboomspruit, Transvaal (present-day Mookgophong, Limpopo Province)
TOPi Reference number(s) 07569
Date(s) as per drawing(s) '9-3-1945' and '14.3.1945'

Keywords Residence, Regionalism, thatch, bluegum poles, facebrick, Schmickl, detailing
Signed Norman Eaton ARIBA Chartered Architect

The house seems to have the same 'romantic' spirit that Harrop-Allin ascribed to Ygdrasil, the Studio Van Wouw and especially the first Anderssen House – with open-beamed ceiling that soars to double-height.

The plan is similar to that of both Homestead Warren (1941) and House Truter-Boshoff (1943), while bearing an interesting resemblance to the later 1964 Van Den Berg House in zoning and layout. If one compares the set of working drawings (one of only a few in the Repository), to those of House Anderssen (1939), which also had a thatched roof, there is a marked difference in the

³⁸ There are currently no drawings in the Eaton Repository, but the house was documented by Prof. Roger Fisher and Nicholas Clarke along with a group of students in recent years.



SECTION THROUGH LIVING ROOM LOOKING TOWARDS DINING ROOM.

SECTION AA THROUGH LIVING ROOM LOOKING TOWARDS FIREPLACE.

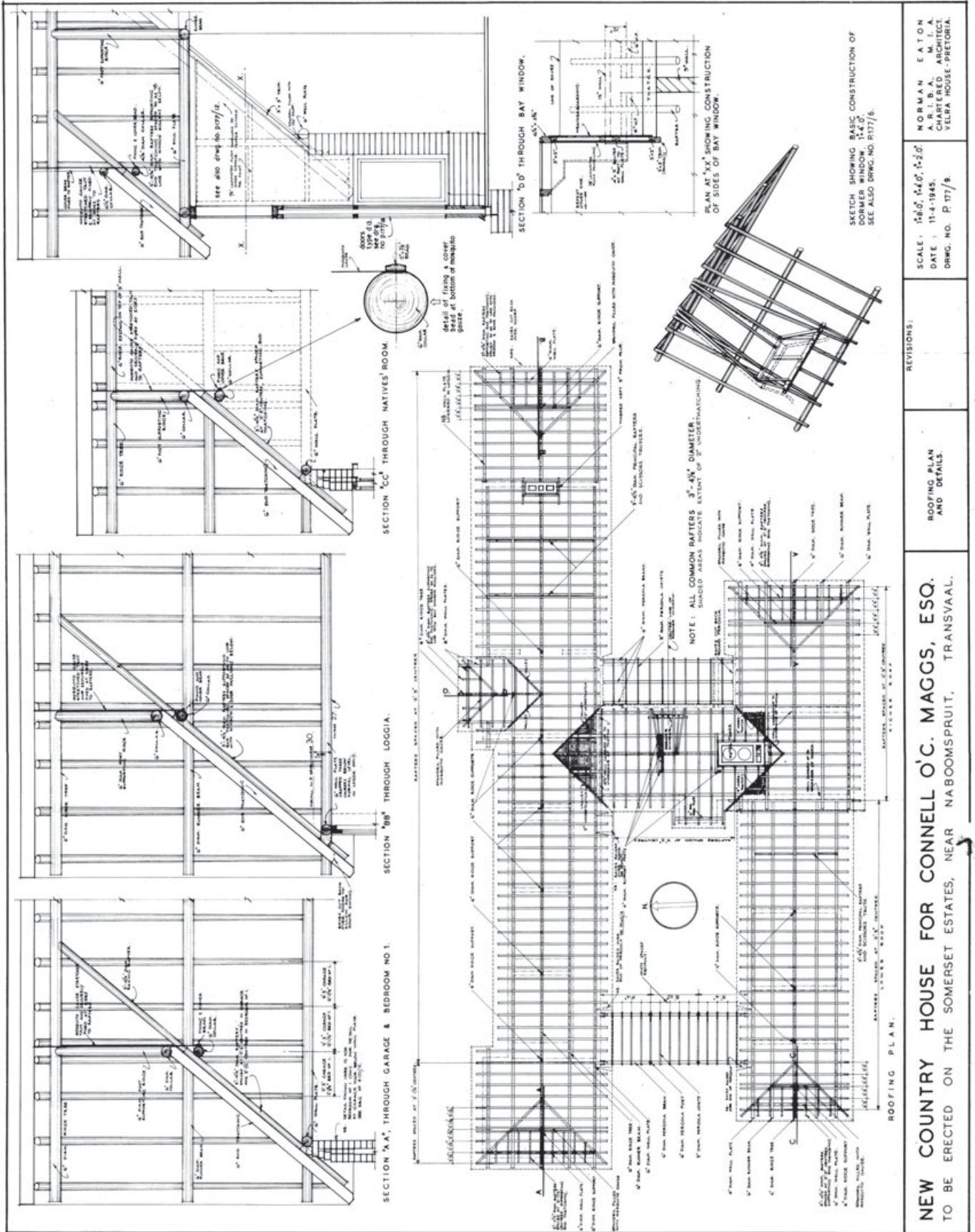
NORMAN EATON
A.R.I.B.A. ARCHITECT
VELLA HOUSE, PRETORIA

SCALE: 1" = 2'-0"
DATE: 14-3-1945
DRWG. NO. P. 177/A

REVISIONS:

SECTIONS THROUGH LIVING ROOM

NEW COUNTRY HOUSE FOR CONNELL O'C. MAGGS, ESQ.
TO BE ERRECTED ON THE SOMERSET ESTATES, NEAR NABOOMSPRUIT, TRANSVAAL.



REVISIONS:

SCALE: 1/8" = 1'-0", 1/4" = 1'-2"

DATE: 11-4-1945.

DRWG. NO. P 177/8

NORMAN EATON
ARCHITECT
CHARTERED ARCHITECT.
VELTRA HOUSE-PRETORIA.

ROOFING PLAN
AND DETAILS.

NEW COUNTRY HOUSE FOR CONNELL O.C. MAGGS, ESQ.
TO BE ERRECTED ON THE SOMERSET ESTATES, NEAR NABOOMSPRUIT, TRANSVAAL.

finesse applied to detailing. It could be because Schmickl was the ‘backroom boy’ at Eaton’s office during the war – Eaton had considered him the master of thatch construction (Fisher *et al*, 1998:134).

While Schmickl had had ‘teutonic diligence’ and ‘Viennese finesse’ (*ibid.*), apparently he did not share Eaton’s enthusiasm for innovation. The set of drawings bears testament to the careful and skilled attention to detailing. Especially the resolution of the usually problematic junction of thatched roof and wall is handled with refinement, where the ‘wall plate’ is a pole runner beam along the corbelled edge of the wall. Facebrick is used selectively to articulate space. Beautiful double rafter details, scissor truss details (reserved for the living room only), window seat, pergola, mosquito screens, fireplace and other details attest to the delicate and poetic handling of humble materials.

House Connell O’C Maggs was the last house for a few years: Eaton had received the large commission of the new Ministry of Transport building that would keep him occupied until 1948. This marks the end of the Eaton & Fair Partnership and two new firms were established: Norman Eaton Architect, and Norman Eaton and Partners.

3.3. 1946–1966 Post-War Period

Eaton had turned 40 during the War, the age at which most architects supposedly produce their mature work. However, he would probably live up to the latter myth in the last period of his career.

Following various trips to eastern Africa, Eaton had also fairly recently returned from his voyage to South America (1945), which had brought him into first-hand experience of the Brazilian variant of modern architecture. Sublimation of

African qualities now found expression in all aspects of his work, particularly visible in his alternative use of bricks. While there are still references in his work to Wright, Niemeyer, Marx, and later nuances of Neutra and van der Rohe, Eaton had truly come into his own as a master of his trade.

There are 31 residential projects in the UP Repository from this period, mostly set in Pretoria. Two houses that reflect his affinity with the early advocacies of Moerdyk and Pierneef, include the house design for artist Willem Hendrikz in Swalkerskraal (1951), Plettenberg Bay, and the house and studio for artist Esias Bosch in Witrivier, Mmpumalanga (1961). Another interesting house that departs completely from his lineage to date, is the design for the house of Laurence Scully, the (then) art teacher at Boys High School in Pretoria (1962). With the exception of the latter, domestic designs are a culmination of the lineage of typologies to date, with growing integration of man-made and nature through horizontality and attendant textures and material uses. Possibly his best domestic projects, Houses Greenwood (1948–1953) and Anderssen (1949–1950), attest to his developed individuality.

Urban schemes from the latter period of Eaton’s career are all within the modern idiom, with arguably, the highlight of his career being the Netherlands Bank in Durban (1960–1965). Other buildings of particular importance include the Pretoria Netherlands Bank (1946–1955), the *Wachthuis* (1956–1959) and Polley’s Arcade (1957–1959). Eaton was also commissioned to do the restoration of the Reinet House, Graaff-Reinet (1952–1956).

Interesting unexecuted schemes include the proposal Eaton had done for the new Administration Buildings at the University of the Witwatersrand (1964) and his entry for the *Afrikaanse Taalmonument* (1965).

1948

Title African Compound

Location Pretoria Country Club, Pretoria

TOPi Reference number(s) 07545

Date(s) as per drawing(s) 'September 1948'

Keywords Extensions, existing homestead, *Afrikaanse woning* [Afrikaans home]

Signed Norman Eaton Architect

Preceding the Greenwood Village (April, 1950) by a few years, Eaton designed the African compound in line with African form-giving, hailing a traditional village layout. Local materials of thatch, natural stone and gum-pole were used.

Like beads on a string, functions are expressed in plastic, organic form along a sinuous wall and contrast the rigid formality of the dorms along

the southern edge. Space is thus defined between organic and rectangular form, between African expression and Western standardization. The notion of juxtaposition was a design device that would also be applied by Aalto in his work, who regarded the duality as a symbolic gesture. The sinuous binding wall, used for the first time in the Greenwood House (design started August 1948) was probably a distillation of the Brazilian organic line found to be compatible with African qualities. Refer to the discussion on the 1951 additions by Eaton to the Golf Club scheme.

Drawings date from September 1948 to 1949, and seem to have been done on both occasions by Eaton himself.

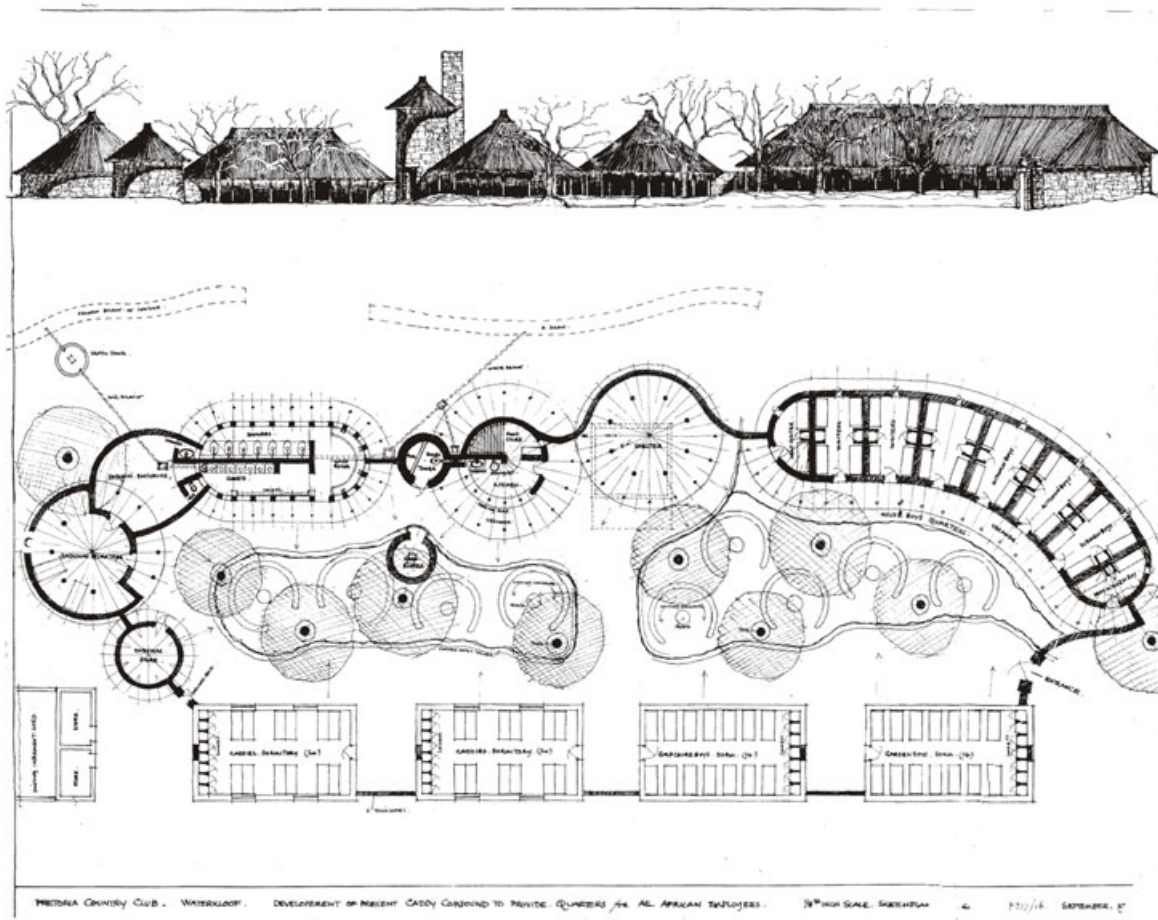


Figure 86: African Compound, Pretoria Country Club, Pretoria*. The design was not executed exactly as Eaton had envisaged it (1948–9).

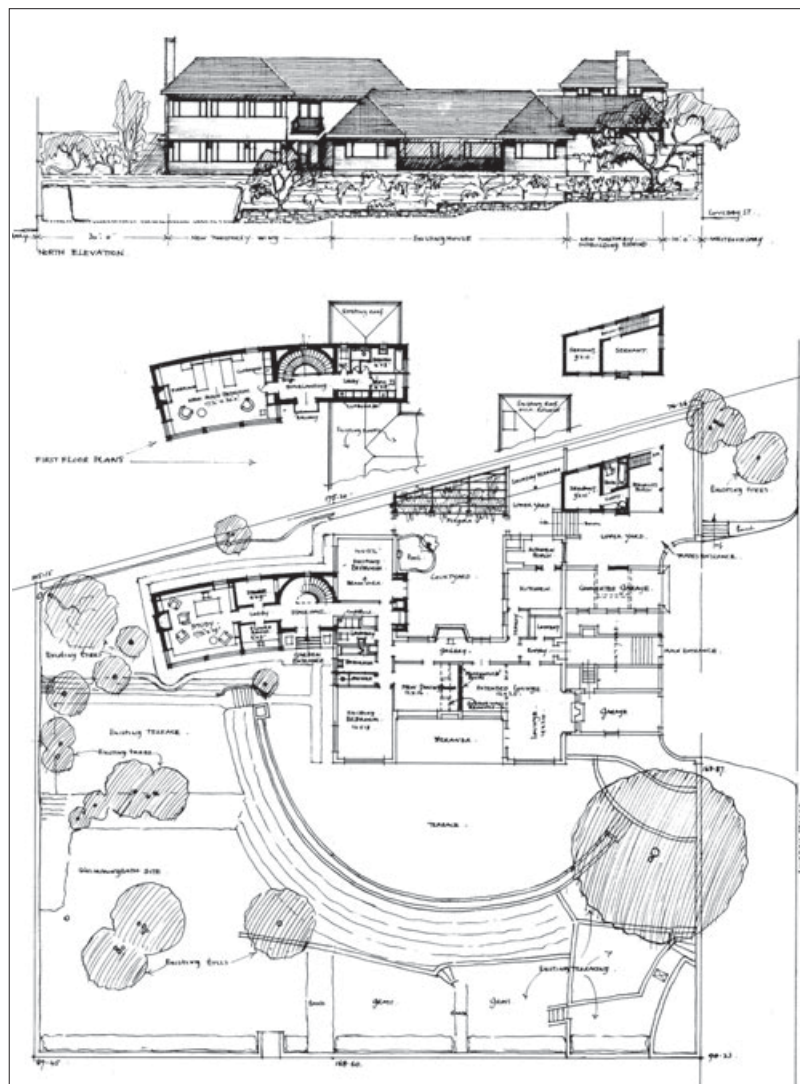
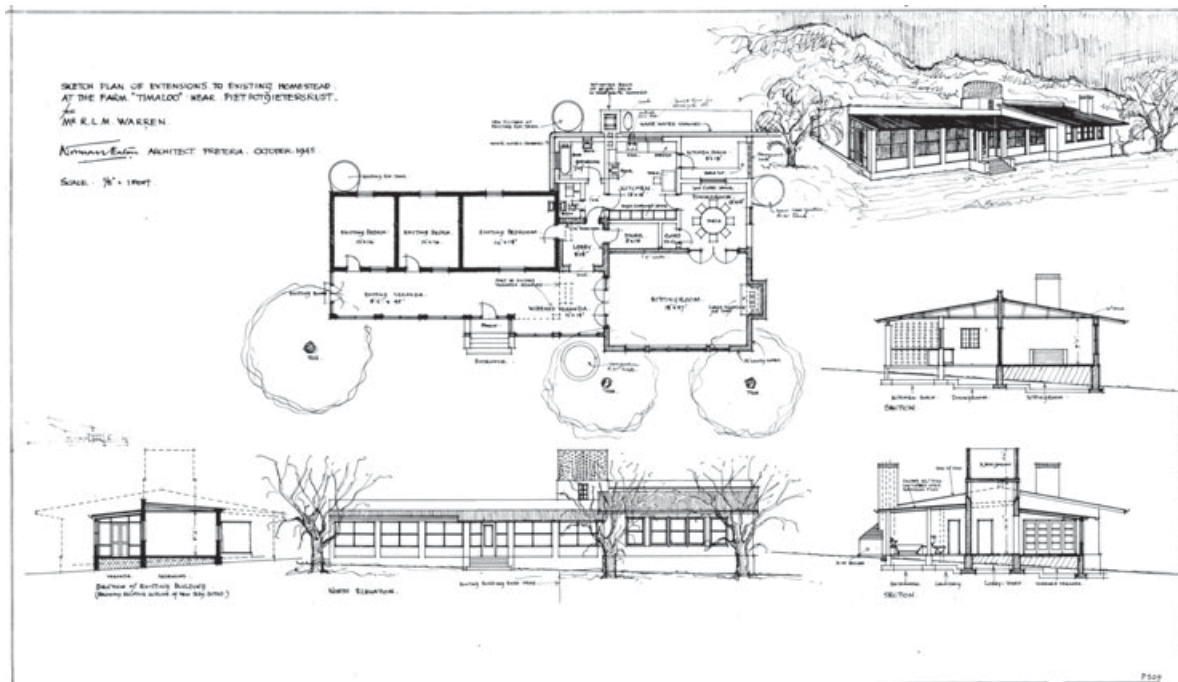


Figure 87 (top): Extensions to a Homestead for Mr Warren*, at farm 'Timaloo' near Pietpotgietersrust (1948), current-day Mokopane, Limpopo Province. **Figure 88 (right): Additions to House Hamilton***, Loveday Street, Muckleneuk, Pretoria (1948).

Title Extensions to existing Homestead for Mr R.L.M. Warren*

Location At farm ‘Timaloo’ near Pietpotgietersrust (current-day Mokopane, Limpopo Province)

TOPi Reference number(s) 07572

Date(s) as per drawing(s) ‘October 1948’

Keywords Extensions, existing homestead, *Afrikaanse woning* [Afrikaans home]

Signed Norman Eaton Architect

Extensions are proposed to an existing homestead on the same farm where Eaton had proposed a new homestead in 1941. Eaton added to the existing bedrooms, while widening the verandah. A large rainwater tank is articulated in brick and forms a prominent feature in the extensions. The section of the existing relative to the new shows deep overhangs, especially on the northern perimeter. Eaton also took cognizance of the positions of existing trees.

The drawing includes a freehand perspective, which is rather unusual for Eaton, but clearly in his hand.

Title Additions to House Hamilton*

Location Loveday Street, Muckleneuk, Pretoria

TOPi Reference number(s) 07740 or 07575

Date(s) as per drawing(s) ‘November 1948’

Keywords Additions, existing house, Pretoria Regionalism, village

Signed Norman Eaton Architect

Alterations and additions to the H-shaped existing house, which he had originally designed in 1939 (see 07525).

The house takes on a similar formal approach of the ‘village’ as demonstrated in Cottage Teichman (1940). Notice how the curvilinear staircase is pushed into the building envelope because of its proximity to the building line. A sweeping semicircular terrace defines the place-

ment of the house on site – a typical Wrightian site strategy. The house is in a good condition today, as noted previously.

Title House Greenwood (1948-1953)*

Location The Willows, Pretoria

TOPi Reference number(s) 06992, 07079, 07730, 07731, 07732

Date(s) as per drawing(s) First sketch plan: ‘August 1948’. Second sketch plan: ‘May 1949’ then ‘August 1949’. The later drawings date from ‘May 1949’. The servant village dates from ‘April 1950’. Working drawings are dated ‘March 1951’, ‘29.3.1951’ and ‘5 Aug 1953’.

Keywords Residence, Pretoria Regionalism, Third Vernacular, Brazilian influences, African influences

Signed Norman Eaton Architect

Together with the Anderssen House (1949), House Greenwood is one of the masterpieces of Eaton’s career. The design is a culmination of the lineage of typologies to date: from the elongated L-type, corner-entrance, head-and-tail, axis corridor, wall as binder, spatial hierarchies of served and servant spaces to integration with nature and attention to textures and materials. Along with earlier Houses Venter (1940) and Theron (un-built 1936), the war-period houses Drakensberg, Truter-Boshoff and Tindall seem to have been the pre-studies for House Greenwood.

Following various trips to eastern Africa, Eaton had also fairly recently returned from his voyage to South America (1945), which had given him first-hand experience of the Brazilian variant of modern architecture. The commission would seemingly be the first for a new house since his return from the Americas. The most notable difference between House Greenwood and his lineage to date, is the substitution of previously straight site binding elements with free-flowing,

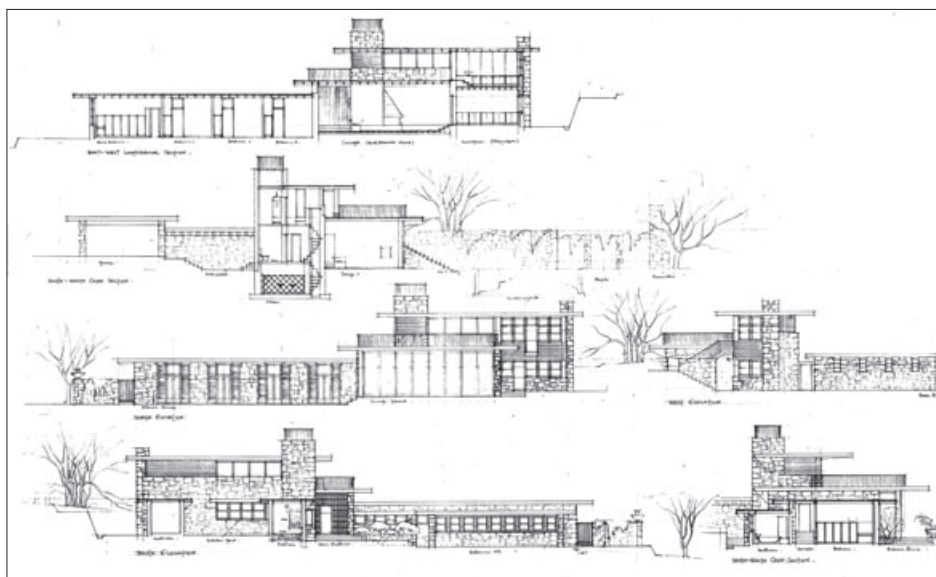
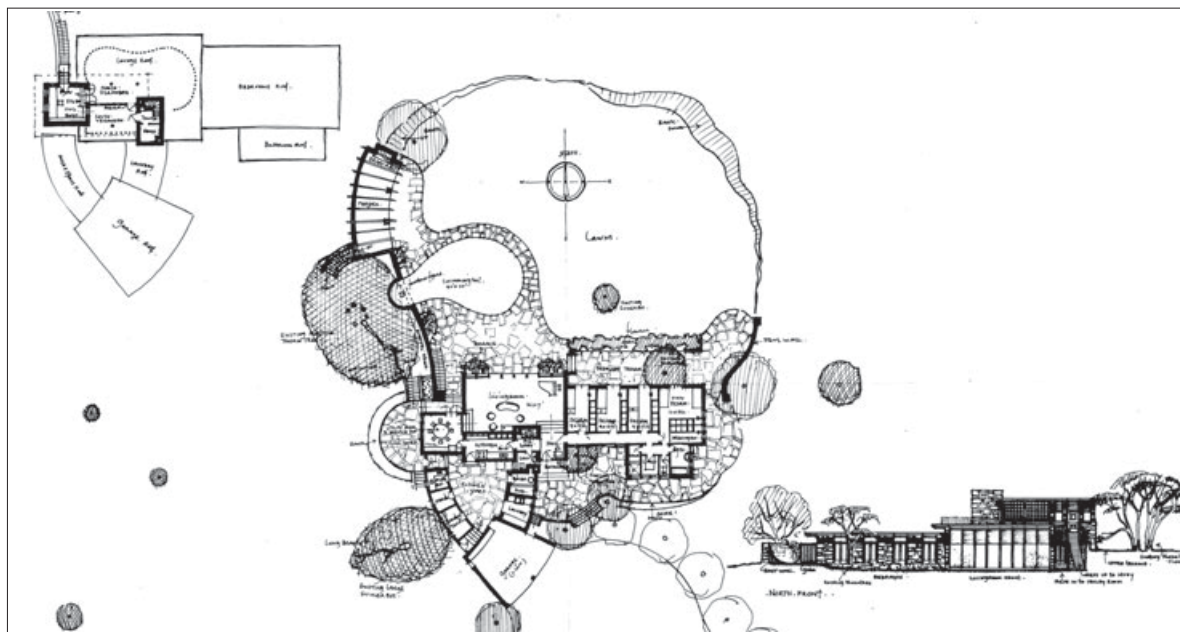
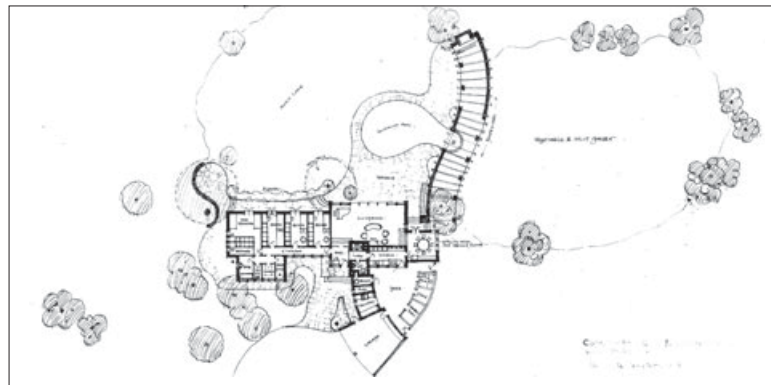


Figure 89 (top): House Greenwood*, The Willows, Pretoria with the initial (accidental?) 'inverted' concept proposal (August 1948). **Figure 90 (middle): House Greenwood***, The Willows, Pretoria, the revised concept proposal (May 1949). **Figure 91 (bottom): House Greenwood***, sketch plans (Aug 1949).

sinuous lines that seem to follow the natural curves of the site but also trace artificial, curvilinear form.

Eaton had been impressed with the work of Oscar Niemeyer who had showed him the scheme for Belo Horizonte and had also given him a copy of a new publication of the scheme (28/8/45 diary entry, Eaton Collection, UP Repository). The curvilinear site bounding elements of Casa do Baile (1943), Pampulha, Belo Horizonte possibly inspired Eaton – he could have recognized the affinity between Niemeyer's free-flowing, sensuous curves and African organic plasticity. Interestingly, Stauch would also contrast linear form with the sinuous line in his domestic work following his trip to Brazil³⁹ (Peters in Fisher *et al*, 1998:182–4).

Niemeyer had employed a combination of curvilinear low retaining walls, along with a curved concrete canopy to extend into the landscape and define a permeable edge between the sinuous swimming pool and the landscape beyond, terminating in a small changing pavilion. Where Eaton had previously reinterpreted the Cape Dutch pergolas as rectilinear site binding elements (e.g. House Tindall), he now translated the pergola as a curvilinear extension of the scheme, dematerializing the solidity of the wall and extending into nature.

The flat roof makes its reappearance for the first time since the early thirties, as Eaton had wanted wide projecting eaves 'far-flung and shaded in appearance to suit the site ... something that fitted quietly into the site rather than contrast it' (Harrop-Allin, 1975:73) for House Greenwood. With the exception of the first floor study, which is faced with wood panelling, the external walls are of coursed random rubble stone, quarried on the site. The dwelling is rectilinear, north facing with strong horizontal emphasis – the latter is enhanced by the fact that Eaton had carefully selected rubble stone in roughly

equal sizes with linear or elongated shapes to lay coursed horizontal strips. The house steps along the contours of the site, and extends into the garden where natural and man-made are sensitively integrated with the sloping site.

Rubble stonewalls form sinuous lines that extend into the landscape to form a roughly circular clearing in the veld. Terraced banks embrace this planted lawn clearing while separating 'cultivated nature' from natural veld on the slightly higher levels beyond. Richly decorated brick paving with *rondel* patterns and insets on the constructed terraces contrast the surrounding koppie. Curiously, similar to the Boyes House (1934), a low wall would extend to the north-west to connect a large thatched guest rondavel added at a later stage.

The living room, at a slightly raised level, has heavy timber beams and column posts. Hierarchical differentiation in level changes is complemented by changes in material. Apart from timber panelling in the dining room and study, all other interior walls are bagged and painted white. The paving bricks of external terraces are carried into the entrance hall of the house and from there into the bedroom wing passage and the bedrooms themselves. The floors of the dining, living room and study are of knotty pine laid in tightly jointed broad shelving planks. Cape shutters provide privacy for bedrooms on the lower level that open directly onto the garden. Large living area windows reveal expansive views to the north.

To the east of the house sits an irregular village built for the servants, reminiscent of a 'kraal' enclosure. More rounded rubble stonework, as opposed to the coursed, horizontal and rectilinear shaped rubble stonework for the house, was used for the huts and enclosing walls of the village. The latter has a stronger vertical emphasis.

³⁹ See Motif Sheet 11, Chapter 4.

sis, as opposed to the horizontality of the house, also enhanced by the texture resulting from the choice of stone. The space making, forms and materials are compellingly reminiscent of Great Zimbabwe.

Chipkin maintains that, together with the Anderssen House (1949), the Greenwood House made the greatest impact on architects beyond Pretoria (Chipkin, 1993:288).⁴⁰ He continues to compare both houses to Japanese pavilions in their simple rectangular forms and volume changes for living and sleeping areas, and the random koppie-stone walling on the exterior and cool white interior spaces. The pervasive influence from Japan can of course be demonstrated in most examples drawn from the classic period of modern architecture with characteristic modifications (Biermann, 1980:6).

According to Du Toit (1983:49), Eaton had worked on a grid three-dimensionally derived from standardized building components (windows) in his later work. This seems to be the case in both the Greenwood and the Anderssen houses, where the disciplined grid of the windows is carried through so that all other elements align accordingly, which he had already done in his non-residential work. Besides his treatment of various forms of symmetry, Wright had also used the grid or 'unit system' as a simple ordering device in his work, to unify parts into a larger whole. Similar to Eaton's previous work, parallels can be drawn with what Wright had referred to as his 'in-line' house typology – where the plan is established by a baseline or horizontal axis that determines the disposition of a primary longitudinal volume and serves as a foil for secondary cross axes⁴¹(Laseau, Tice, 1992:74–85).

Contrasting and complementing the discipline of the grid, the kidney-shaped mountain pool and indeed the sinuous lines that bind the house to the landscape, are 'sublimation of the Brazilian impact found to be compatible with African quali-

ties' (Chipkin, 1993:293). Harrop-Allin describes the pool as being reminiscent of an African calabash (1975:73). In the design for Hakahana, Har-tebeestpoort Dam (1952), Stauch would also clip the free-form pool onto his house as part of the architectural composition (Peters in Fisher *et al*, 1998:195).

Although the initial concept plan shows the paving of terraces surrounding the house in random slate patterning, Eaton's later drawings show the densely woven brick texture with circular *rondel* patterns. Alternative use of bricks was by now part of Eaton's repertoire. According to Fisher, Preller's use of local craftsmen to do paving and walling around his home and studio had inspired the brick paving design which Eaton had done for the Greenwood House – and in fact, he had used the same craftsmen to carry out the work for the Greenwood House (Fisher *et al*, 1998:134).

The house bears an interesting resemblance to the masterwork of his contemporary, Finnish architect, Alvar Aalto. Villa Mairea (1938–1939), Noormarku, Finland is compounded out of a mixture of brickwork, rendered masonry and timber siding. The Villa is an L-shaped building, with a kidney-shaped pool and sinuous formal extensions. According to Frampton, the villa represents a conceptual link between 'rational-constructivist tradition of the 20th century and evocative heritage of the National Romantic movement' (Frampton, 1980; 1992:199). The Villa's primary spaces, dining and living, border a sheltered garden court, set within a roughly circular forest clearing. The 'geologically striated' mass of the house and 'irregularly contoured perimeter of the sauna plunge pool suggest a metaphorical opposition between

40 Both houses had been published profusely, including in international journals of note such as *The Architectural Review*, Volume 113, Nr 678, June 1953 s.p.

41 Refer to Motif Sheets 13–14, Chapter 4.

artificial and natural form, and this principle of duality obtains throughout the work' (*ibid.*).

Where Eaton's pool and woven brick paving recall African form-giving, Aalto's pool recalls the sinuous perimeter of the Finnish lake. The head and tail motif, already imbedded in Eaton's domestic vocabulary, is also found in Aalto's work. In the Villa, the wooden siding of the public rooms also contrasts the white rendering of private areas. Eaton had, in fact, employed similar complex formal operations for the execution of House Greenwood.

David Bunn, in his chapter entitled 'Whited sepulchres: On the reluctance of monuments' in *blank__architecture, apartheid and after* (1998:92–117) was critical of Eaton's use of African motif. The following denigration was directed at the Greenwood House, which he describes as a '... diminutive, Africanized Mount Rushmere with a hint of the tourists' interest in souvenir architecture' (Bunn in Judin, Vladislavic, 1998:115).

Had he seen the scheme for the Pretoria Country Club, especially the design for the Compound (1948), he would have found an even more 'appropriate' target for his disapproval. With reference to Pretoria, and specifically the Greenwood House, he asks:

How were élite whites to figure themselves in this landscape? Several of Eaton's houses allude to the passing of instinctual experience beyond the reach of whites. At the centre of his sites there is usually a conventional, rectilinear modernist dwelling – but the edges fall away to roundness. Outdoor recreational areas are shaped like *kraals*; swimming pools look like gourds; and the whole is surrounded by walls of random stone quarried on site. At the edges of the domestic world, there is a reminder of another kind of sensory experience (*ibid.*).

For Bunn, the monumental referencing to village life reaches a 'bizarre conclusion' in the Greenwood House and Village where 'exploitative labour relations are concealed by an architectural fantasy about vanishing tribal identity and the past' (*ibid.*).

For him, the unequal exchanges between 'master' and 'servant' are theatricalized as a relationship between modernity and African tradition.⁴²

Yet Eaton did not reserve African formal allusions in some kind of condescending gesture to 'servant' spaces. The *rondavel* shape and *kraal* references were used for several programmatic applications, as demonstrated in the design for the swimming pool booths and bowls' shelter for the Club House, Pretoria Golf Club.

Similar to Preller's 'kraal', Eaton's own house (c. 1960) would consciously take on the same architectural formal references. Where a rounded shape was used for the servant's quarters in the 1933 Boyes House, the very same design device translates as a *rondavel* addition as guest room to the Greenwood House. The idea of the village is perpetuated in several of his house designs for the very 'élite whites' that Bunn refers to. Moerdyk had in fact propagated the *rondawelhuis* as early as the 1920s as the most appropriate form of dwelling, literally to evoke an African settlement and had built several of these for Afrikaner families.

42 There is some irony in this generalized accusation. Eaton had had a great respect for local craftsmanship, not only evidenced in the way he documented craft in his African diaries (see for example entry dated 26.1.49), but also in his observations and repeated criticism towards 'colonial' architecture instead of an appropriate African architecture (see several diary entries).

In a personal communication with his friend Esias Bosch, the latter had told the researcher that Eaton had slept in the servant's quarters with a leaking roof, while his servant had slept in the main house – hardly an exploitative gesture.

The sinuous lines extending into the landscape – misunderstood by Bunn as ‘edges falling into roundness’ to become Disney-fied versions of Africa – and surrounding walls have their origins in his earliest work as a response to the landscape *via* Wright and in his later work in a more organic expression *via* Brazil.

Eaton’s work often resonated with that of Moerdyk’s – whose application of the African motif also has many precedents not reserved for seemingly derogative or supercilious applications.

Alterations over the years sadly include the replacement of the brick carpet. Although altered and very neglected, the house is still beautiful today.

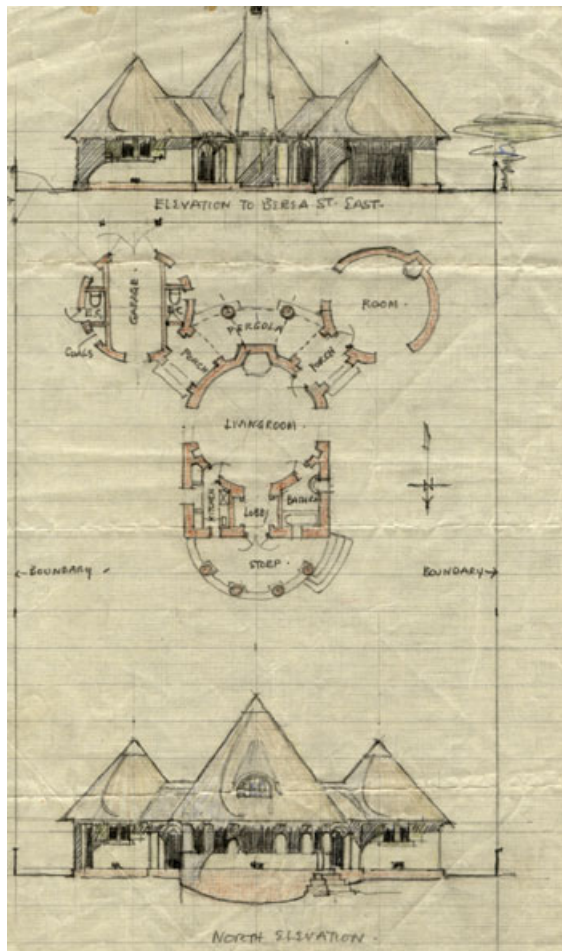


Figure 95: Unknown Cottage*, Berea Street, Muckleneuk, Pretoria (c. 1949).

1949

Title Cottage Unknown*

Location Berea Street, Muckleneuk, Pretoria

TOPi Reference number(s) None

Date(s) as per drawing(s) no date on drawings, but inserted in 1949 diary

Keywords Cottage, Moerdyk, *rondavelhuis*

Signed none

The drawing for the cottage in Berea Street, was loosely inserted into Eaton’s 1949 diary. The assumption is made that it therefore belongs to this year, especially if it is considered that similar work was produced during this time such as for the Greenwood Village (1950) and the African Compound at the Pretoria Golf Club (1948). The very simple rondavel seemingly has its genesis in Moerdyk’s *rondavelhuis* (1920; 1989:9–12).

Title House Anderssen (1949-50)*

Location The Willows, Pretoria

TOPi Reference number(s) 06994, 07554

Date(s) as per drawing(s) ‘July 1949’, ‘August 1949’, ‘31-12-49’, ‘16-1-1950’, ‘2-2-1950’, ‘4 Feb 1950’, ‘24-5-1950’

Keywords Residence, Pretoria Regionalism, Third Vernacular, Brazilian influences, African influences

Signed Norman Eaton ARIBA Chartered Architect

Arguably Eaton’s domestic masterpiece, the Anderssen House is in many ways a restrained, yet more refined version of the Greenwood House. It is also a culmination of his design pedigree. The house was done for the same clients as the 1939 timber house. By now however, the client was partial to the use of stone as in Wright’s Taliesen West (1937–?), near Scottsdale, Arizona (Harrop-Allin, 1975:77).

The long, narrow corridors of Wright’s Usonian houses, which Eaton had employed for the first time in the single-storey design for House Theron

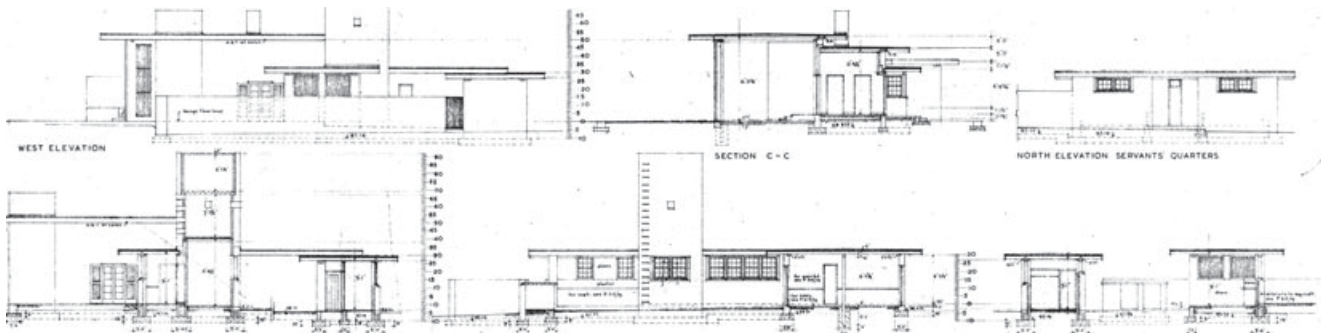
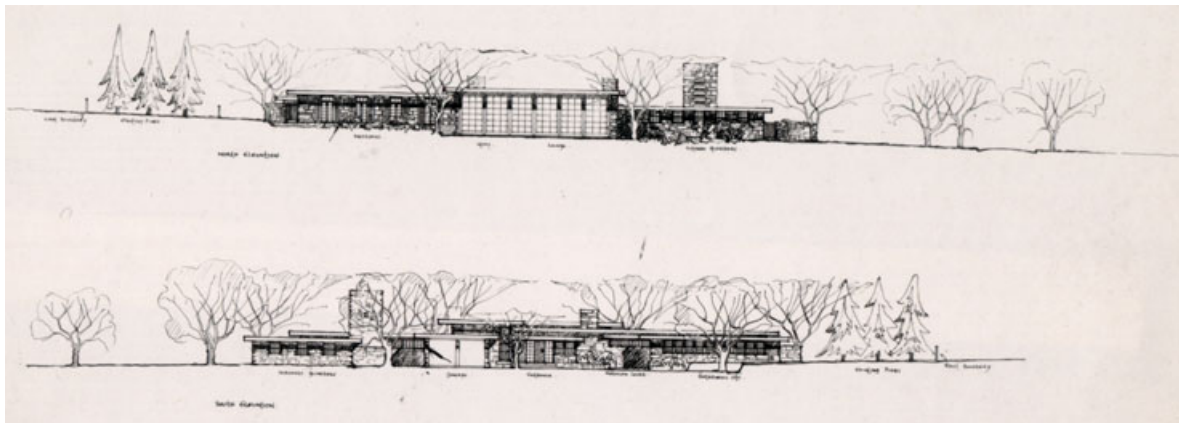
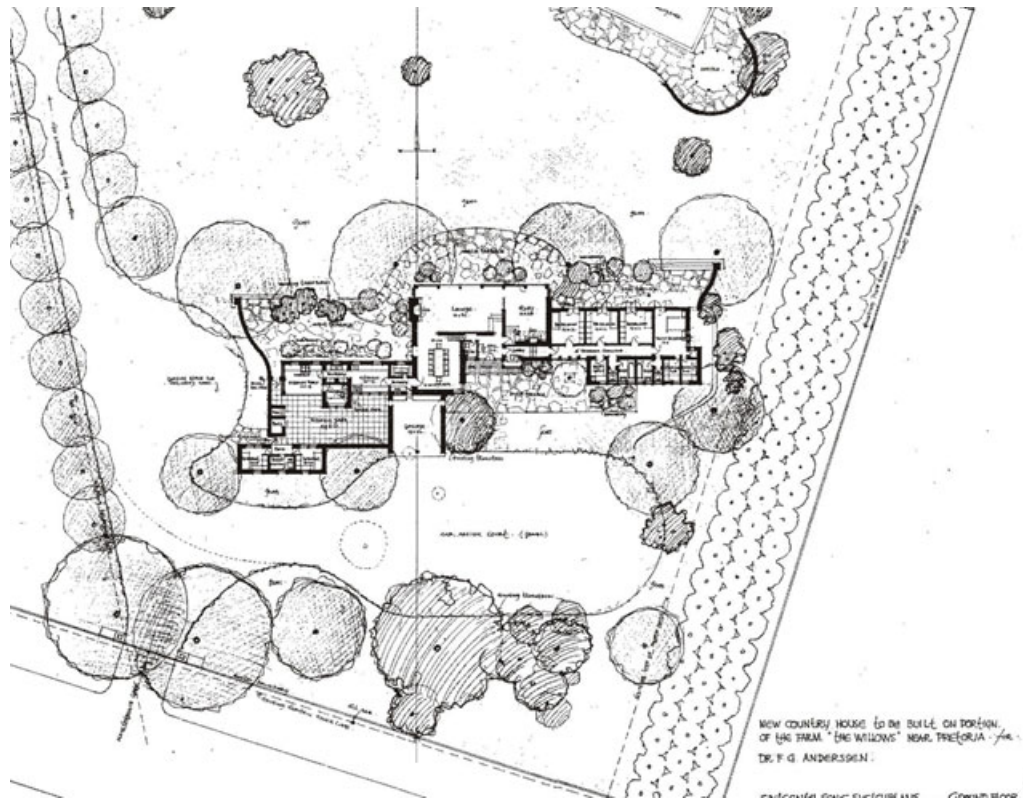


Figure 96 (top and middle): House Anderssen*, The Willows, Pretoria (1949).

Figure 97 (bottom): Working drawings of House Anderssen*, The Willows, Pretoria (1950).

Figure 98 (on the next spread): Working drawings of House Anderssen*, The Willows, Pretoria (1950).

(un-built 1936), has now been advanced. The attenuated L-shape makes its appearance yet again. Unlike many of his previous entrance schemes, where the entrance was at an angle at the corner junction of the plan (e.g. House Greenwood), the entrance to the house is defined as a pin-wheel on plan, a development from the 1943 House Drakensberg. The threshold is articulated carefully with changes in material and texture.

As perpetuated in previous schemes (generated in the un-built House Theron), he used the hallway to create the horizontal demarcation of public and private. Bedrooms are compartmentalized along a long narrow corridor to face north, while all servant spaces are confined to the south of the corridor. The internal wall as divider between servant and service spaces – as indeed applied to the first design for the Anderssens – has been widened to accommodate the services, so that as in House Lodder (1939), the wall has indeed become utilitarian.

While the curvilinear binding wall and sinuous lines of the outer terraces are still applied, it is far less elaborate than in the Greenwood House. As in the latter, Eaton had worked on a grid three-dimensionally derived from standardized timber windows. He used the grid as a design discipline, setting a rhythm and a framework for patterns. Accordingly, transverse roof timbers align with the window grid of the interior.

Unlike the smoothly finished beams of the Greenwood House, these beams are natural, peeled cypress poles, 150mm in diameter. They support smaller sized poles, which run the length of rooms. On this latticework of timber rests the roof covering of hessian, building paper and cement screed. Cypress poles form aligned vertical supports along the glazed north wall of the central part of the house. Spatial wall divisions align to the grid. Stauch (and Cole Bowen) had also used double-stock steel window units to

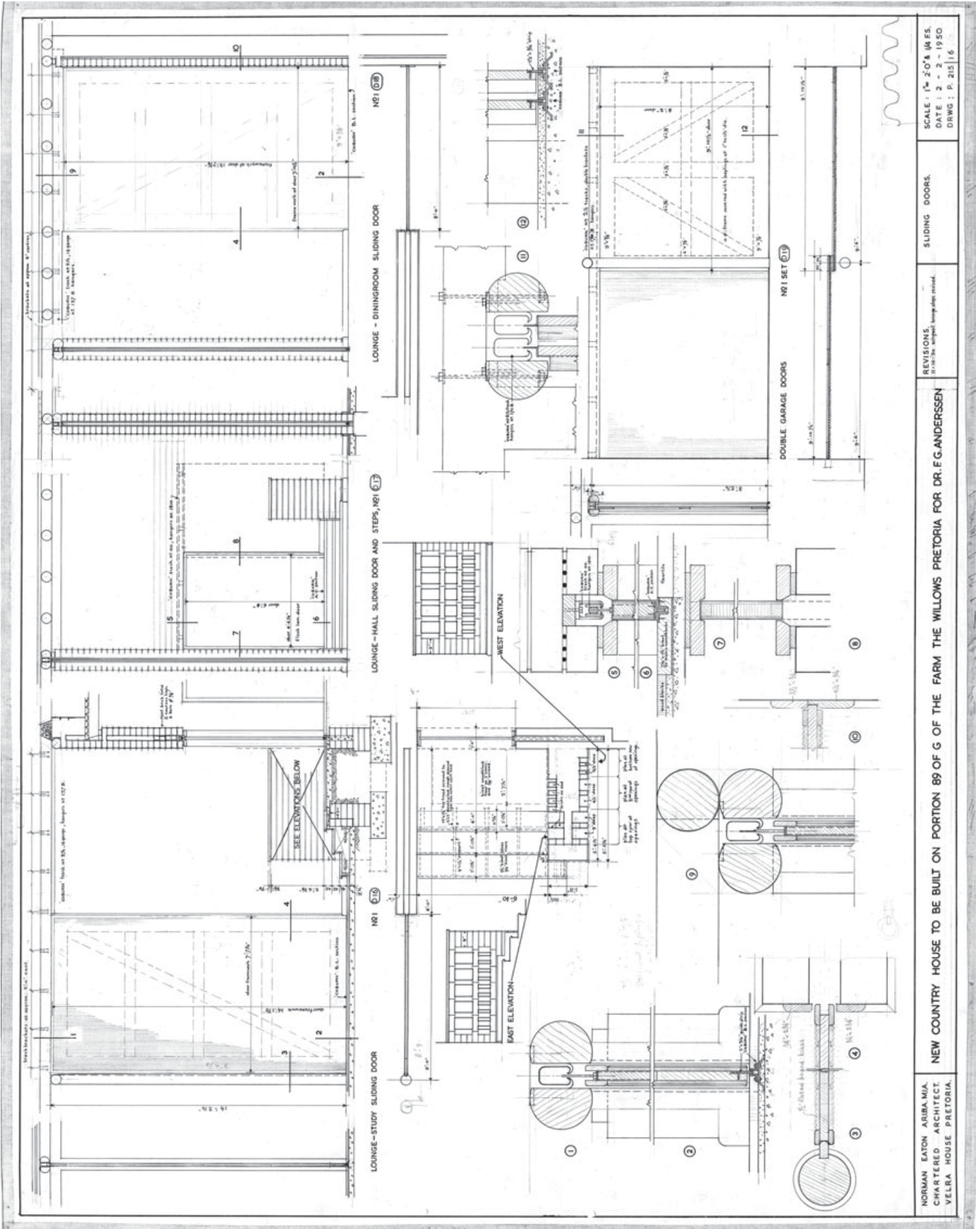
establish a grid that would hail a 'steel window aesthetic' (Peters in Fisher *et al*, 1998:185).

Where Eaton had previously often only allowed a visual connection between the living room and garden beyond in the form of horizontal strip windows, here (as indeed in the simple 1943 Cottage Jacobsz and House Greenwood), doors open directly onto the verandah. As in House Greenwood, the bedroom doors also open directly onto the terrace, so that he uses yet again the Cape shutters to allow privacy. In some respects, the bedroom has been elevated to the status of living room, in the same treatment of material and inside-outside linkage.

Hierarchical differentiation is again afforded in level and ceiling height changes, complemented in material use. While the floors of the passages, entrance hall and kitchen wing are of brown quarry tiles, the living room and bedroom floors were rendered in a unique design of *kiaat* strips laid end to end in repetitive bands similar to the terra-cotta faggoting of his Bank buildings. Alexis Preller maintained that 'this kind of treatment was of African derivation, being inspired by the fine example of tribal grass mats that Eaton admired and collected' (Harrop-Allin, 1975:80).

Another feature of the interior that appears here for the first time (similar, honeycombed brick openings were used in House Connell O'C Maggs, 1945), is rectangular wall recesses. Although Eaton had used wall recesses before (House Boyes, Farmstead Warren), these were sunken patterns. The rectangular wall recesses are in repetitive ranks, similar to the variation in ranks used for brick apertures for grilles he had used in the Little Theatre (1950). According to Harrop-Allin, the wall recesses could be another African derivative as a very similar device is used along the African East Coast in Arabian Architecture (*ibid.*:81).

The different variety of trees and their positions



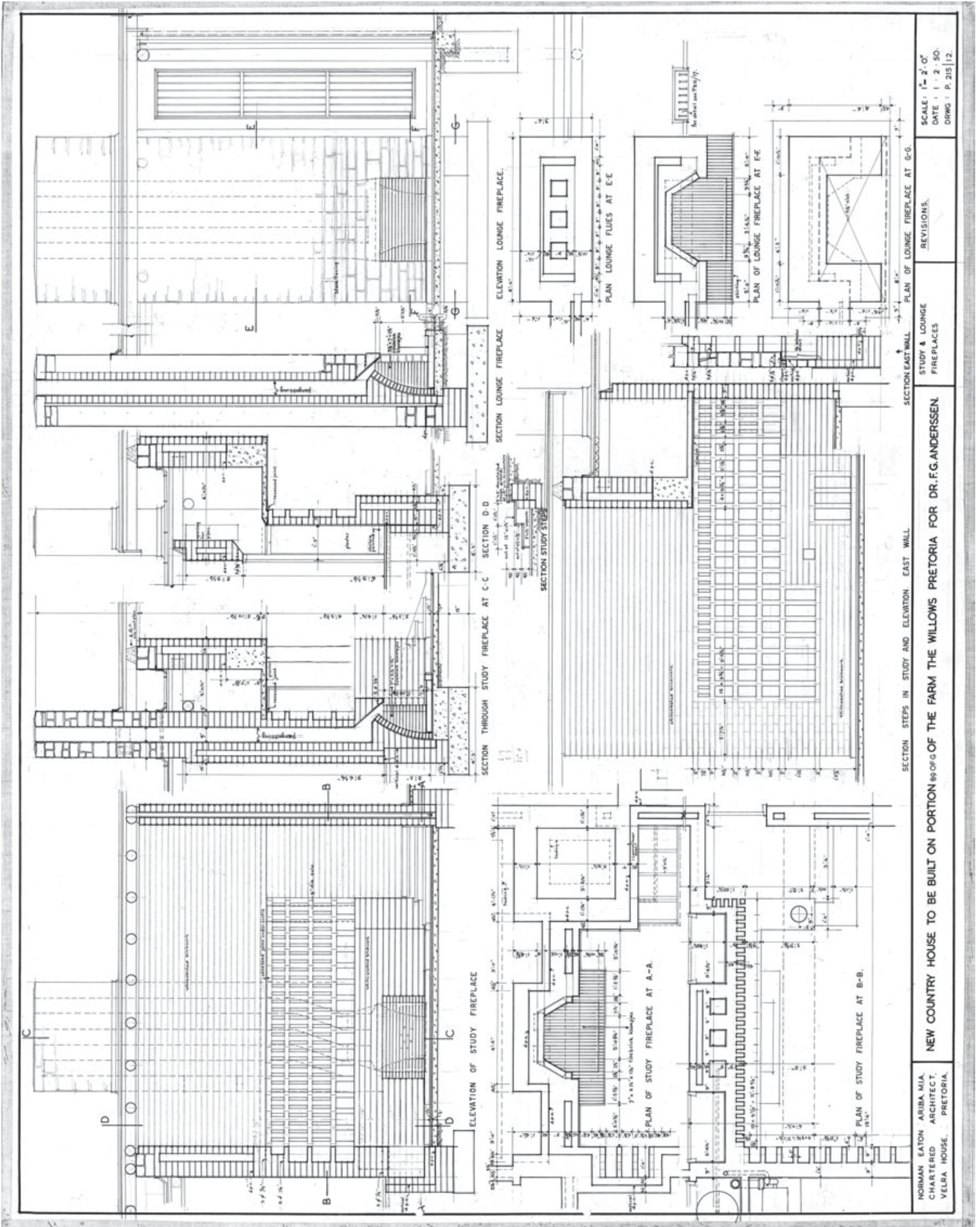
SCALE: 1" = 2'0" & 1/4" ES.
DATE: 2 - 2 - 1950
DRWG: P. 215 | 16

REVISIONS
If in the original long after issue.

SLIDING DOORS.

NEW COUNTRY HOUSE TO BE BUILT ON PORTION 89 OF G OF THE FARM THE WILLOWS PRETORIA FOR DR. F. G. ANDERSSON

NORMAN EATON ARIBA, M.A.
CHARTERED ARCHITECT.
VELLA HOUSE PRETORIA.



SECTION STEPS IN STUDY AND ELEVATION EAST WALL

STUDY & LOUNGE FIREPLACES

REVISIONS

NEW COUNTRY HOUSE TO BE BUILT ON PORTION 89 OF 6 OF THE FARM THE WILLOWS PRETORIA FOR DR. F.G. ANDERSEN

NORMAN EATON ARIBA MIA
CHARTERED ARCHITECT
VELSO HOUSE
PRETORIA

SCALE: 1" = 2'-0"
DATE: 1-2-50
DRWG: P. 215/12

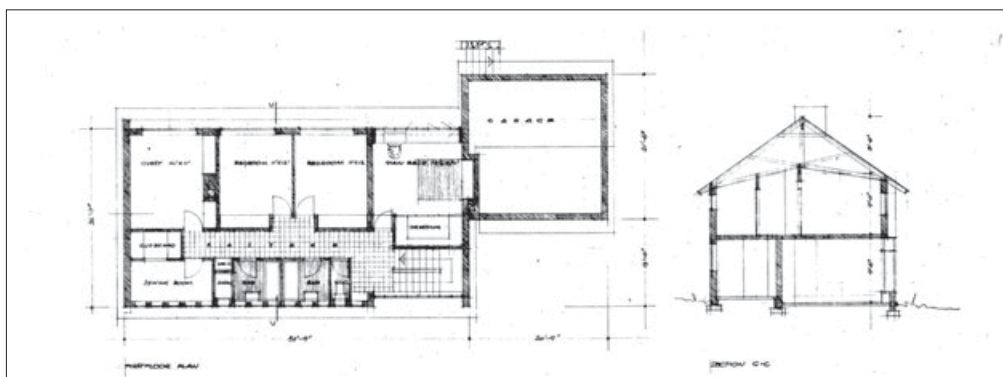
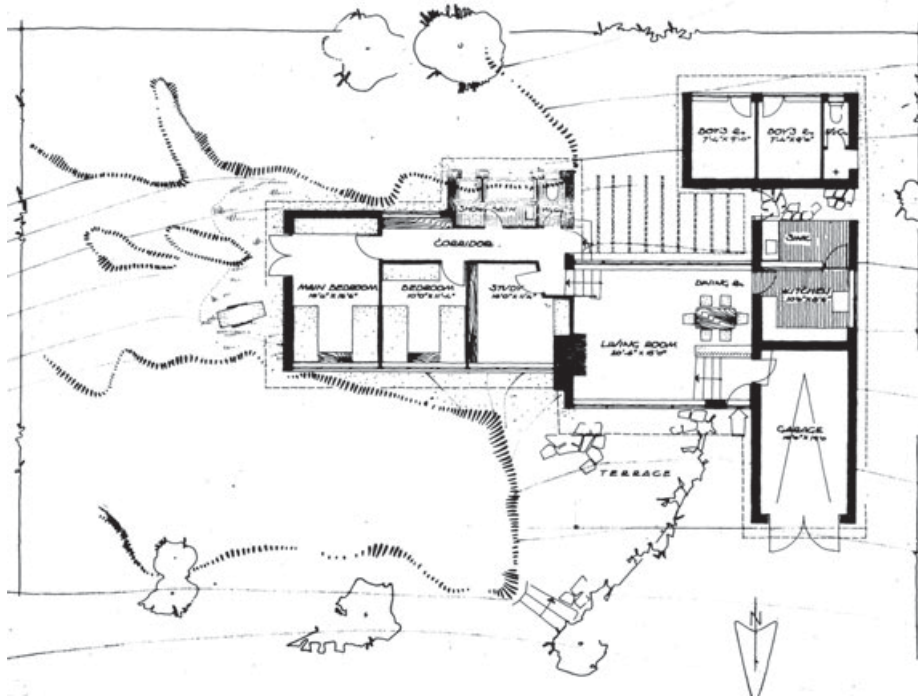
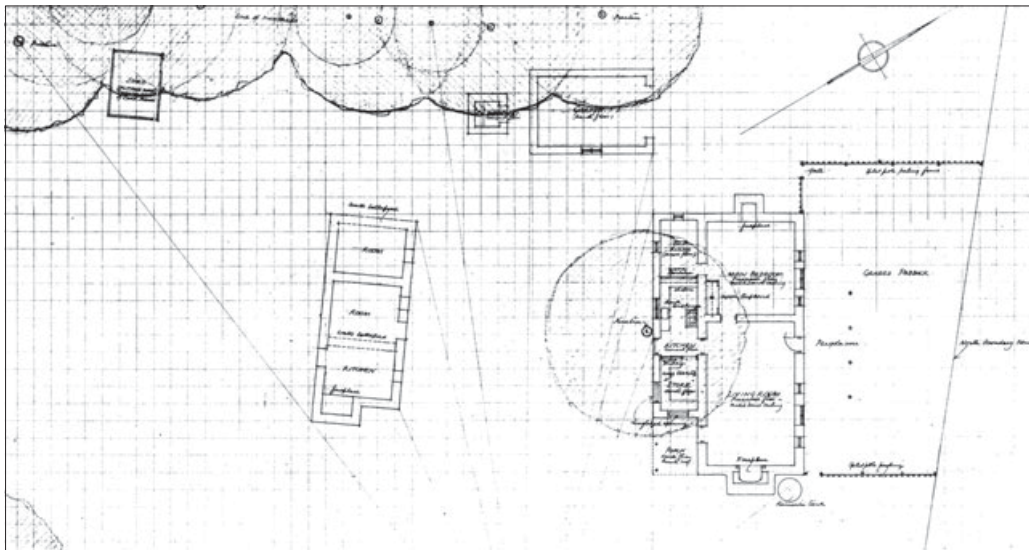


Figure 99 (top): House Willem de Sanderes Hendrikz, on the farm 'Swalkerskraal', Plettenbergbaai, Western Cape(1951). **Figure 100 (middle):** House Axelson, Meyerspark, Pretoria (1952). **Figure 101 (bottom):** House Du Preez*, Hurlingham, Johannesburg (1953).

are as always included in the design drawings, even advancing onto terraces, so that nature becomes part of the composition. ‘The expansive dimensions of the house, its low horizontal forms, and the wood and stone finishes are a direct response to the openness and country atmosphere of the site’ (*ibid.*:78).

Harrop-Allin continues,

in its integration of detailing and design, of materials and forms, of the parts with another and with the whole, and of the man-made and the natural, the Anderssen house is the finest of Norman Eaton’s domestic designs (*ibid.*: 81).

1951

Title House Willem de Sanderes Hendrikz
Location On the farm ‘Swalkerskraal’, Plettenbergbaai, Western Cape
TOPi Reference number(s) 07750
Date(s) as per drawing(s) ‘August 1951’

Keywords Residence, Pioneer house
Signed Norman Eaton ARIBA Chartered Architect

The house for artist Willem de Sanderes Hendrikz⁴³ resembles Eaton’s own house in its simplicity, humble form giving and unpretentiousness. Similar to Eaton’s house, existing features are carefully mapped out, including trees and views.

1952

Title Vineyard terraces on Eaton’s portion on the farm Garstfontein, east of Pretoria
Location Portion D.A.F. on the farm Garstfontein, east of Pretoria
TOPi Reference number(s) 07524
Date(s) as per drawing(s) ‘18-8-52’

Keywords Vineyard terraces, Olive trees
Signed Norman Eaton

Title House Axelson
Location Erf 516, Meyerspark, Pretoria
TOPi Reference number(s) 07517
Date(s) as per drawing(s) ‘27.3.52’

Keywords Residence, Modern Movement, Pretoria Regionalism
Signed Norman Eaton Archit.

House Axelson is a smaller, more intimate version of Eaton’s L-type configuration and Theron devices. A simple little house that steps along with the contours of the site, with low-pitched roof, deep overhangs and seemingly rendered in facebrick finishes.

1953

Title House Du Preez*
Location Cromartie Road, Hurlingham, Johannesburg
TOPi Reference number(s) 07529
Date(s) as per drawing(s) ‘17 April 1953’, ‘5.6.53’

Keywords Residence, Regionalism
Signed Norman Eaton Arch.

The new outbuildings, in a fan-like configuration similar to House Greenwood, were used to cre-

⁴³ See introduction to Hendrikz in Appendix B. His younger brother was none other than André Hendrikz, who was one of a group of Johannesburg architects who were greatly influenced by Eaton (Chipkin, 1993:287, 296). According to Chipkin, the elder Hendrikz was a ‘haunted man, ill at ease in the democratic age, ‘yearning for an aristocracy of the spirit’ – an attitude that had led him to flirt with Mussolini’s leadership in the 1930’s’ (*ibid.*: 296). In addition to the connection with Eaton via his brother, he was also responsible for the brass doors of the Bank of Netherlands (1946), Pretoria by Eaton. Hendrikz took his own life in 1959 at Swalkerskraal.

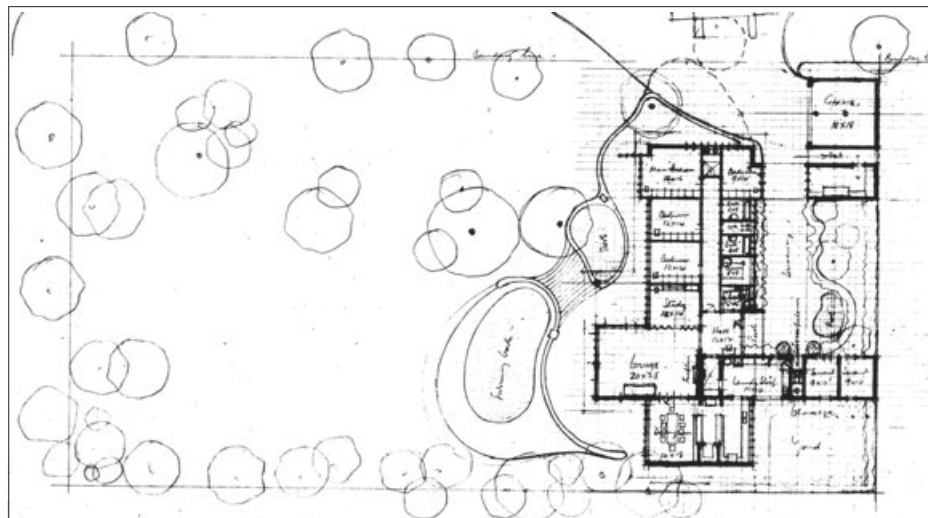
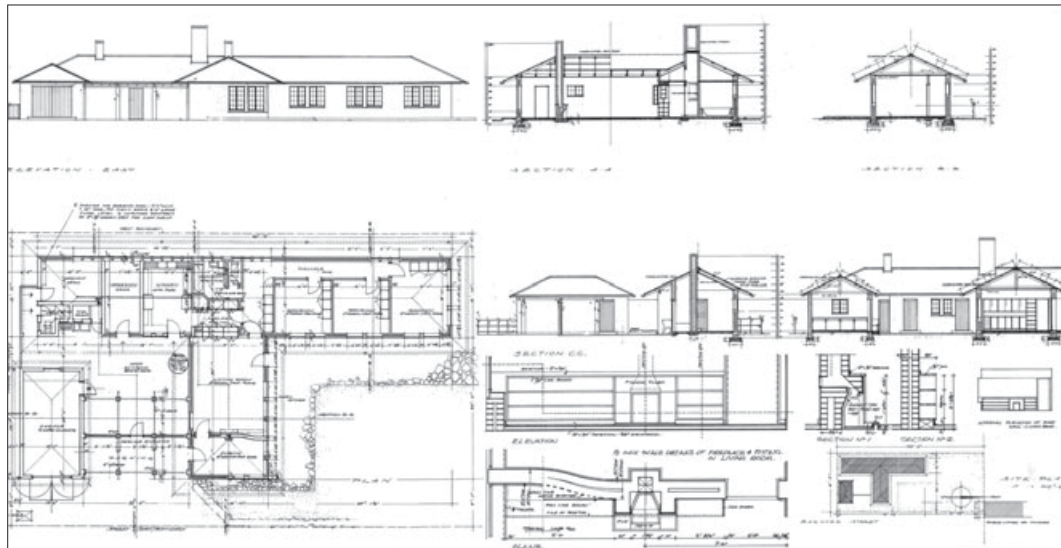
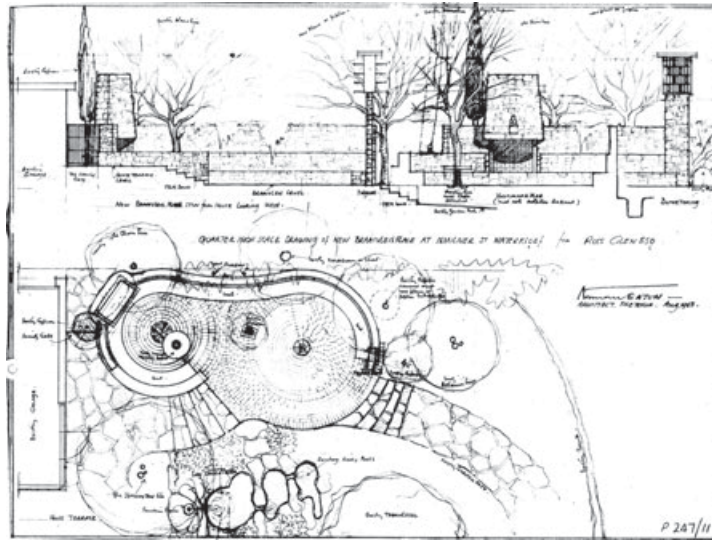


Figure 102 (top): Braaivleisplace (sic) for Ross Glen, 18 Milner Street, Waterkloofrif, Pretoria (1953).

Figure 103 (middle): Cottage and flats Borckenhagen, Barnard Street, Potchefstroom (1954).

Figure 104 (bottom): House Holsboer*, cor. Crown Avenue & Albert Street, Waterkloof, Pretoria (1954).

ate an outside-contained space adjacent to the proposed dwelling. The new house aligns with north, while the fan of the outbuildings aligns with the site boundary. Along with raised steps and pergola, the space between the outbuildings and house creates a threshold and establishes a sense of arrival.

The house is simple and compact, with a pitched roof.

Title Braaivleisplace (sic) for Ross Glen
Location 18 Milner Street, Waterkloofrif, Pretoria
TOPi Reference number(s) 07513
Date(s) as per drawing(s) 'Aug. 1953'

Keywords Braaivleis Place, African influences
Signed Norman Eaton Architect

As in the Greenwood house, Brazilian influence is translated in curvilinear edge gardens, recalling in particular the sinuous forms applied by Niemeyer and the mural gardens of Marx (whose work he was in contact with although they had never met). The Brazilian motif of sinuous line was compatible with qualities found in African art and architecture of plasticity, irregularity, and roundness.

The expression of defining vertical elements (*vuurmaakplek* and *duiwetoring*) is decidedly and consciously African, compellingly similar to those found in Great Zimbabwe. The wall steps to allow a built-in seat, embracing the area and creating a sense of intimacy. Together with the careful attention to textures, materials and scale, the design of the *braaivleisplace* (sic) exudes a phenomenological sense of place, hailing Africa. Each existing tree and shrub has been mapped carefully, including 'the Johnny Tan Tree'.

1954

Title Cottage and flats for Mr. H.H. Borckenhagen
Location Barnard Street, Potchefstroom
TOPi Reference number(s) 07861
Date(s) as per drawing(s) 'August 1954', 'October 1954'

Keywords Cottage, flats
Signed Norman Eaton Architect

Title Additions to House Van Schaik
Location Milner Street, Waterkloof, Pretoria
TOPi Reference number(s) 07559
Date(s) as per drawing(s) November 1954

Keywords Additions, existing residence
Signed Norman Eaton Architect

Title House Holsboer*
Location cnr. Crown Avenue & Albert Street, Waterkloof, Pretoria
TOPi Reference number(s) 07577
Date(s) as per drawing(s) 'Oct 1954', '16/8/1955'

Keywords Residence, Pretoria Regionalism
Signed Norman Eaton ARIBA MIA Chartered Architect

Shortly after the completion of the Pretoria Netherlands Bank, Eaton designed a house for the Managing Director at the time, Dr Holsboer. Harrop-Allin considers this as a 'transition' (1975:81) between the earlier Anderssen and Greenwood houses and the later Moolman and Van den Berg houses. Similar to the first two, he used rough stonework for all external walls – but like the latter two he employed large glazed areas. Unlike the houses mentioned above, this particular house has a pitched roof (and deep eaves), while the garage is tucked underneath natural ground covering.

The house belongs to the lineage generated in Houses Theron (1936), Malherbe (1937) and so forth. As with the introduction of the sinuous

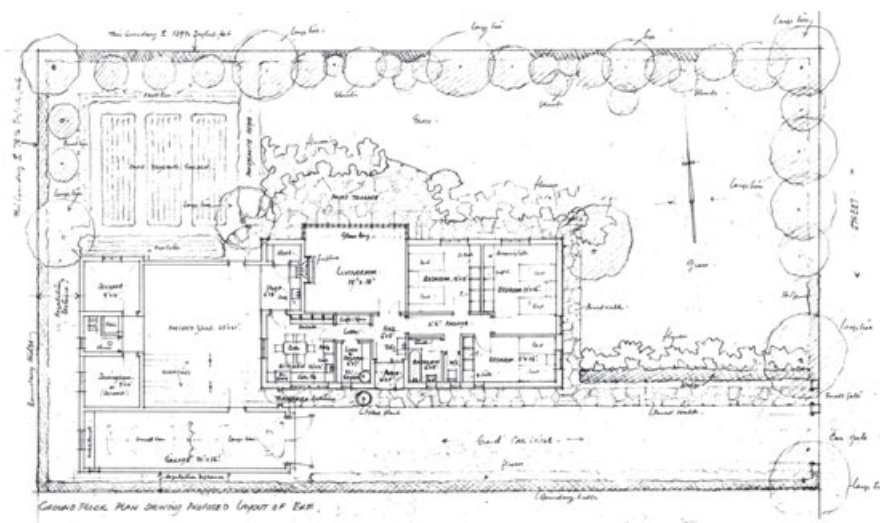
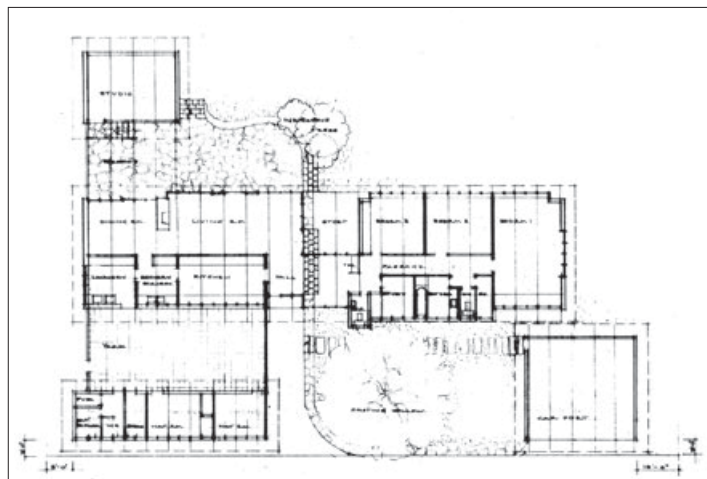
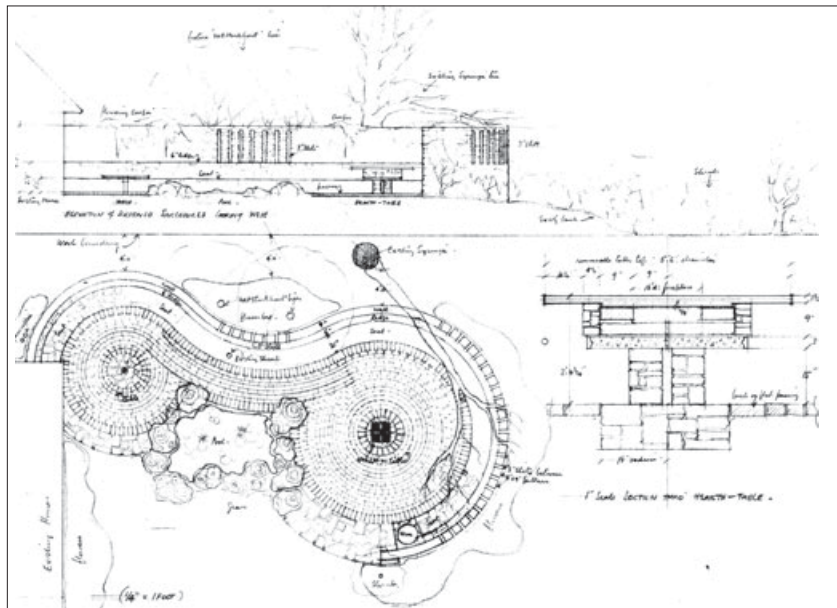


Figure 105 (top): Stone-screened garden enclosure with convertible *braai* table for Mr V.O. Price, 63 Albert Street, Waterkloof (1956). **Figure 106 (middle):** House Heystek, Milner Street, Waterkloof (1957). **Figure 107 (bottom):** House Boorsma, Potchefstroom, North West Province (1958).

line in the Greenwood House, the extension of curvilinear terraces into the garden and the offset of kidney-shaped pool to the rectilinear house are again employed.

See the plan showing how, with small modifications, this house would fit onto another site in Kent Road, Dunkeld, Johannesburg (November 1959)!

1956

Title Stone-screened garden enclosure with convertible braaivleis hearth-table for Mr V.O. Price
Location 63 Albert Street, Waterkloof, Pretoria
TOPi Reference number(s) 07862
Date(s) as per drawing(s) 'July 1956'

Keywords Garden enclosure, hearth-table, African influences
Signed Norman Eaton Architect

Although very similar to the *braai* area for Mr. Ross Glenn, this stone-screened garden enclosure lacks the strong vertical formal references to Africa, yet in texture and organic lines still recall African motifs. Great care was taken with integration of garden, existing trees and enclosure.

Title Rondavel-addition to House Van Wouw*
Location Brooklyn, Pretoria
TOPi Reference number(s) 07560
Date(s) as per drawing(s) '1.3.1956'

Keywords Addition, existing residence, *rondavel*
Signed Norman Eaton Architect

1957

Title House Heystek
Location Milner Street, Waterkloof, Pretoria
TOPi Reference number(s) 07563
Date(s) as per drawing(s) '9.3.1957'

Keywords Residence, Pretoria Regionalism, low pitched roof, standardized window module
Signed Norman Eaton & Louw Architects

The design reminds one of House Holsboer (1954), with the most notable difference being in the sinuous line that is extended from one side of the house through to the other in order to link the studio and entrance. Drawings show faint underlying gridlines generated by the window module. First domestic work signed as 'Norman Eaton & Louw Architects'.

Title Fireplace for House Bennet
Location 356 Hill Street, Arcadia, Pretoria
TOPi Reference number(s) 07742
Date(s) as per drawing(s) 'June 1957'

Keywords: Fireplace
Signed: Norman Eaton Architect

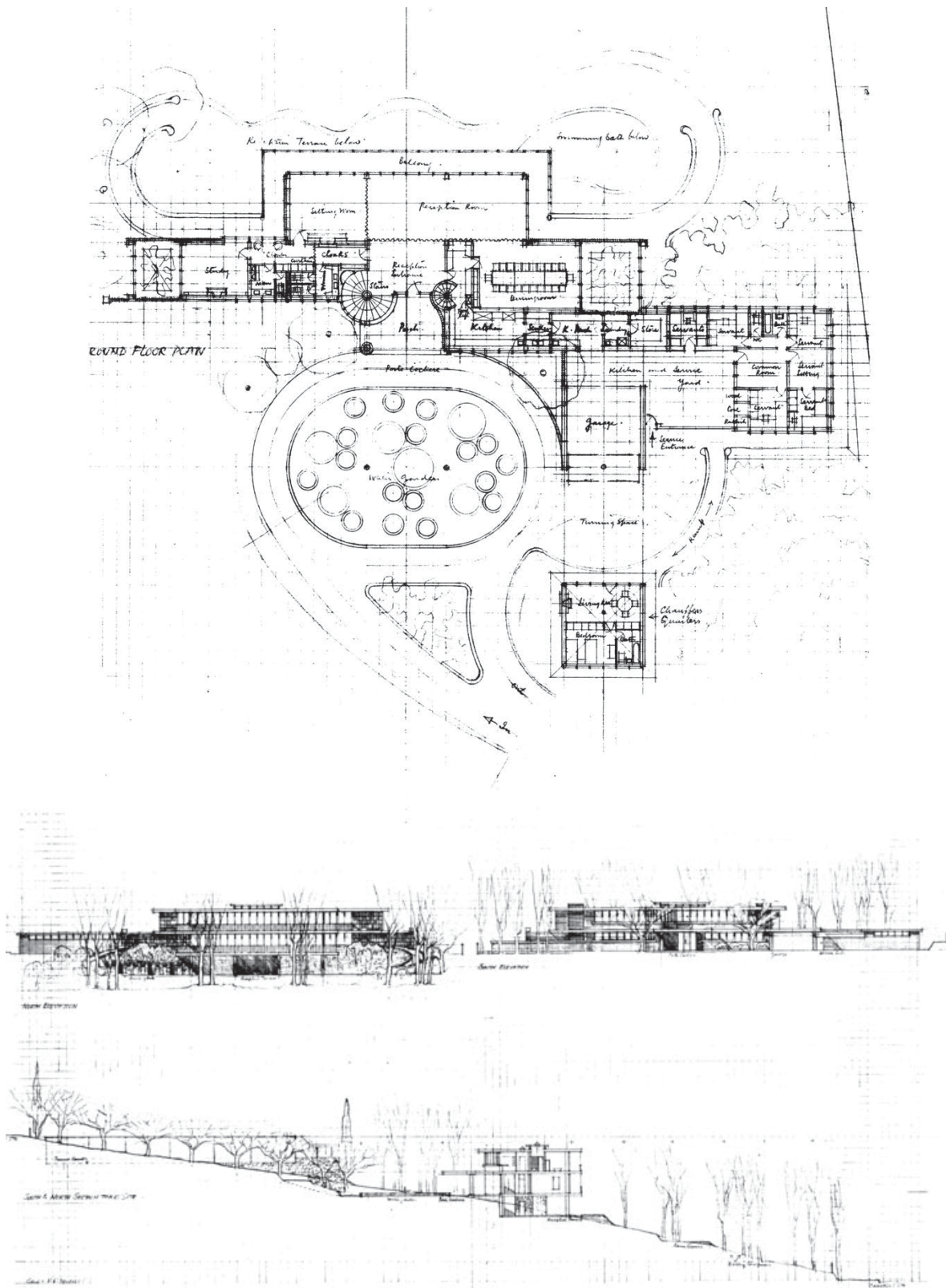


Figure 108: House for the Australian High Commissioner, Canopus Street, Erf 189, Waterkloof Ridge, Pretoria (1959).

1958

Title House Boorsma

Location Potchefstroom, North West Province

TOPi Reference number(s) 07581

Date(s) as per drawing(s) 'May 1958'

Keywords Residence, single storey, pitched roof
Signed Norman Eaton Architect

House Boorsma is a compact, parsimonious version of the Theron-like plan, as always with careful consideration of enclosed yard spaces. The garage is also used to define the southern edge of the backyard. Characteristic of Eaton the garden has been laid out, including a vegetable patch. Drawings show faint underlying gridlines generated by the window module and are dated May 1958, signed Norman Eaton Architect – in fact, it seems that he had done them himself.

1959

Title House for the Australian High Commissioner

Location Between Canopus and Bootes Streets, Erf 189, Waterkloof Ridge, Pretoria

TOPi Reference number(s) 07532

Date(s) as per drawing(s): 'May 1959'

Keywords Residence, High Commissioner, Pretoria Regionalism, Modern Movement, Wright, flat roofs, deep overhangs, window modules
Signed Norman Eaton Architect

By stark contrast to the previous parsimonious house, the house for the Australian High Commissioner is quite extravagant with *porte cochere*, staircases and generous proportions. Yet Eaton's work always leaned to the understatement. He exercised constraint in the diagrammatic layout, very simple facades and projecting, flat roofs.

The house sits comfortably on the site and seems to grow from it. The facade drawings also attest to the rich combination of horizontal and

vertical textures and the same disciplined grid division according to window modules. In fact, Eaton (who had done the drawings himself) had seemingly started with a grid underlay, so that the overall plan seems more regimented. He cleverly positions the two different-sized circular staircases to frame the entrance – which would have rendered a threshold strongly reminiscent of Africa both in form and in scale.

The house opens generously to what must have been splendid views of the city to the north. The attenuated plan and definition of outside spaces are reminiscent of Taliesen West (1937). The sinuous line of the upper floor is picked up again on the lower level with the kidney-shaped swimming pool and low, site binding walls.

Title Alterations to House Peart

Location cor. Long and Edward Streets, Waterkloof, Pretoria

TOPi Reference number(s) 07539

Date(s) as per drawing(s): '12-10-59'

Keywords Alterations, existing residence, garden seat
Signed Norman Eaton & Louw Architects

Alterations to House Peart included the addition of an organic garden seat and an alteration to gable ends.

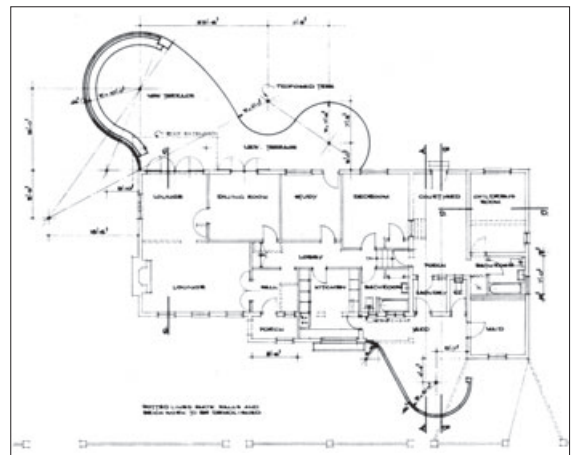


Figure 109: Alterations to House Peart, cor. Long and Edward Streets, Waterkloof, Pretoria (1959).

1960

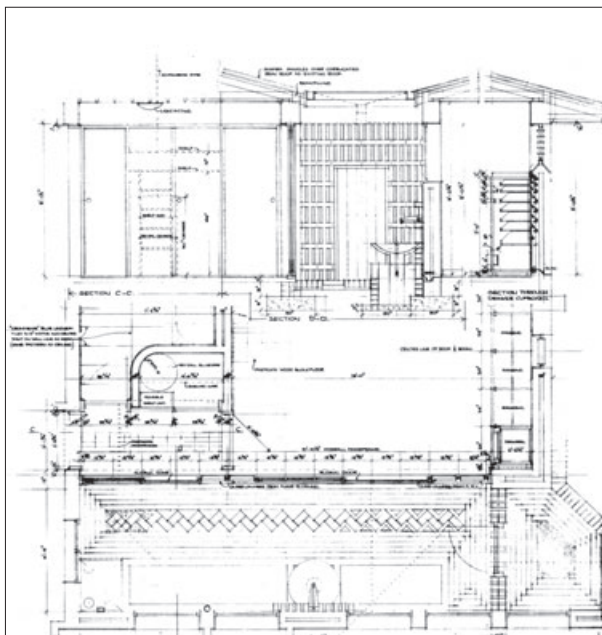
Title Additions to the existing house of Mr. Glen
Location Erf 259, cor. Milner Street and Brooks Avenue, Waterkloof, Pretoria
TOPi Reference number(s) 07567
Date(s) as per drawing(s) '17 Febr '60'

Keywords Alterations, existing residence, garden seat
Signed Norman Eaton Architect

A rather small, one bedroom addition to the existing house. Special attention was given to textures and detailing, with textures strongly reminiscent of African motifs, again recalled in the form of the water spout.

Title *Cul de Sac**
Location Waterkloof, Pretoria
TOPi Reference number(s) none
Date(s) as per drawing(s) c. 1960, no drawings, only two photographs

Keywords Residence, African influence
Signed Not applicable



Eaton's own house, now destroyed, in Waterkloof hailed African forms reminiscent of great Zimbabwe.

1961

Title New Pottery and dwelling for Esias Bosch*
Location Witrivier, Eastern Transvaal (present-day Mpumalanga)
TOPi Reference number(s) 07751
Date(s) as per drawing(s) '8.2.61'

Keywords House, studio, artist, Regionalism, African influences
Signed Norman Eaton Architect

House Bosch and studio was designed for the celebrated South African ceramicist, Esias Bosch. Humble, small, but with a noble sense of place, Eaton appropriately used the word 'dwelling' and not just 'house' to name the design. Like so many other houses Eaton had executed for artists, the house and studio sit very comfortably on the elevated site. Forms and layout are informal and simple.



Figure 110 (left): Additions to the existing house of Mr. Glen cor. Milner Street and Brooks Avenue, Waterkloof (1960). **Figure 111 (right): No drawing in the UP Repository: *Cul de Sac****, Pretoria (c.1960), photograph in the UP Repository as published in Harrop-Allin (1975:116).

Reminiscent of the earlier Greenwood House, where circular and rectangular forms are combined, controlled geometrical forms in relation to each other create spaces in-between. However, unlike the sinuous, curved organic lines of the Greenwood house, Eaton now has employed geometrical forms. Sequences of spaces are therefore carefully contained, and held together in the overall layout. Transitional spaces between different forms are carefully articulated. An African granary-like structure, complete with projecting timber posts ('monkey heads') that remind one compellingly of East African Aksumite architectural traditions, holds the water tanks for the studio, while the kitchen yard for the house has now been transformed into a circular 'kitchen kraal'.

The living room, uncharacteristically not ori-

ented towards north, is positioned to make the most of the beautiful views from the vantage point of the koppie. Due to the tight budget,⁴⁴ gum-pole roof construction was used together with bagged brick textures. Ceramic tiles with inlays of Bosch's own ceramic tiles rendered the floors.

The overall scale, combination of textures and use of materials such as gum-poles, lend a humane, warm quality to the house. The house and studio were not built exactly to the plans – perhaps because of the rock bank on the site and over the years, the artist had made some minor changes sensitive to Eaton's design.

A note on this drawing reads 'refer to my letter to Valerie dated 15.3.61'.

44 Personal communication with Esias Bosch upon visiting him in 2007.

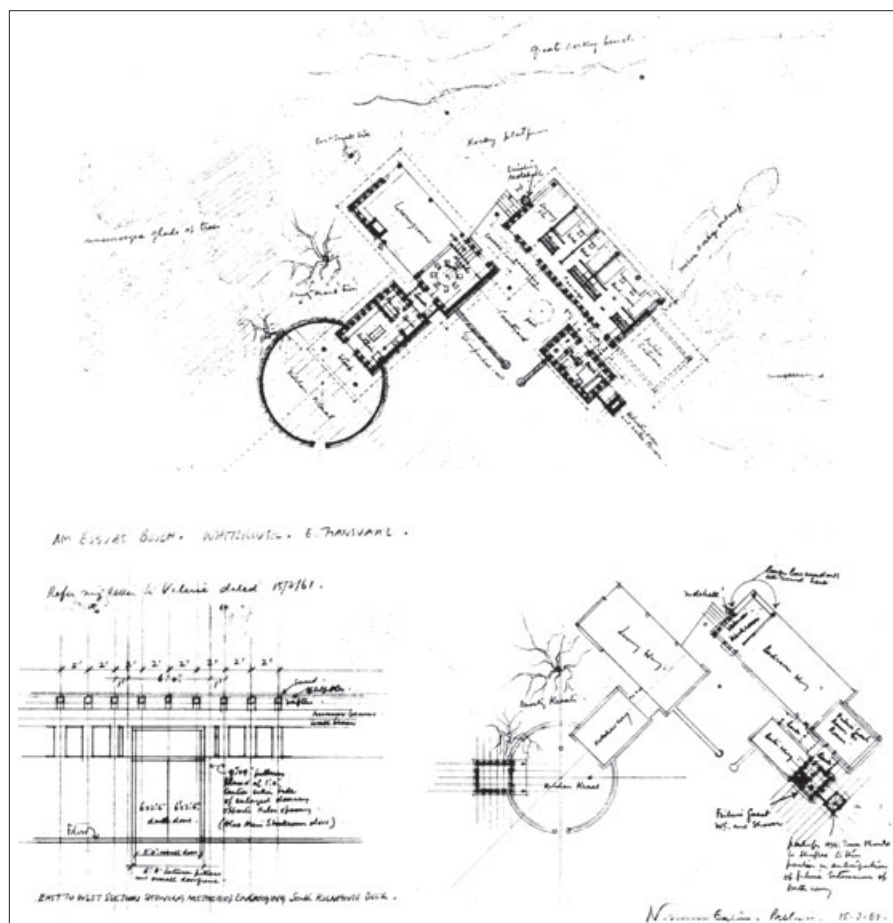


Figure 112: House and Studio for Esias Bosch*, Witrivier, Mpumalanga (1961).

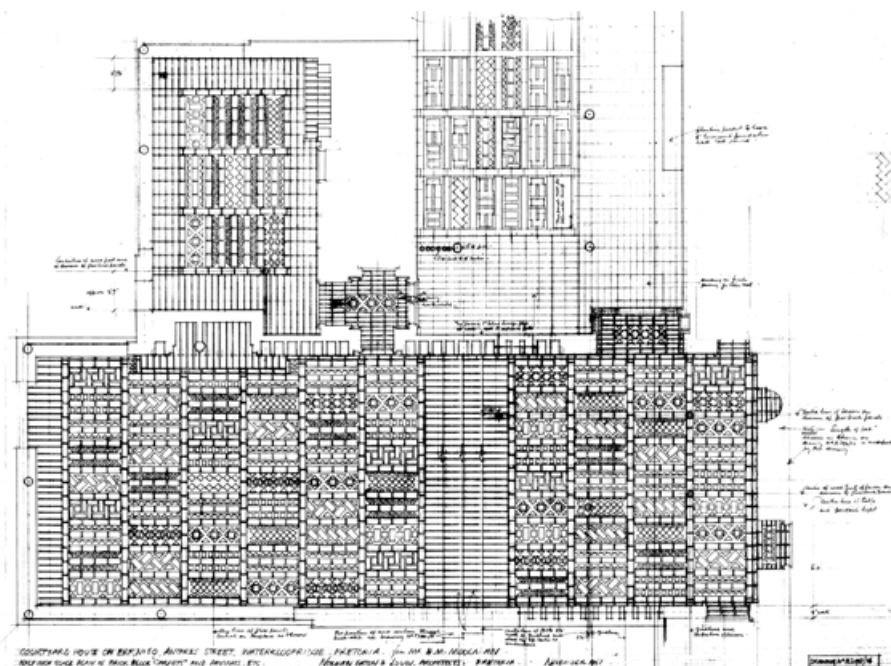
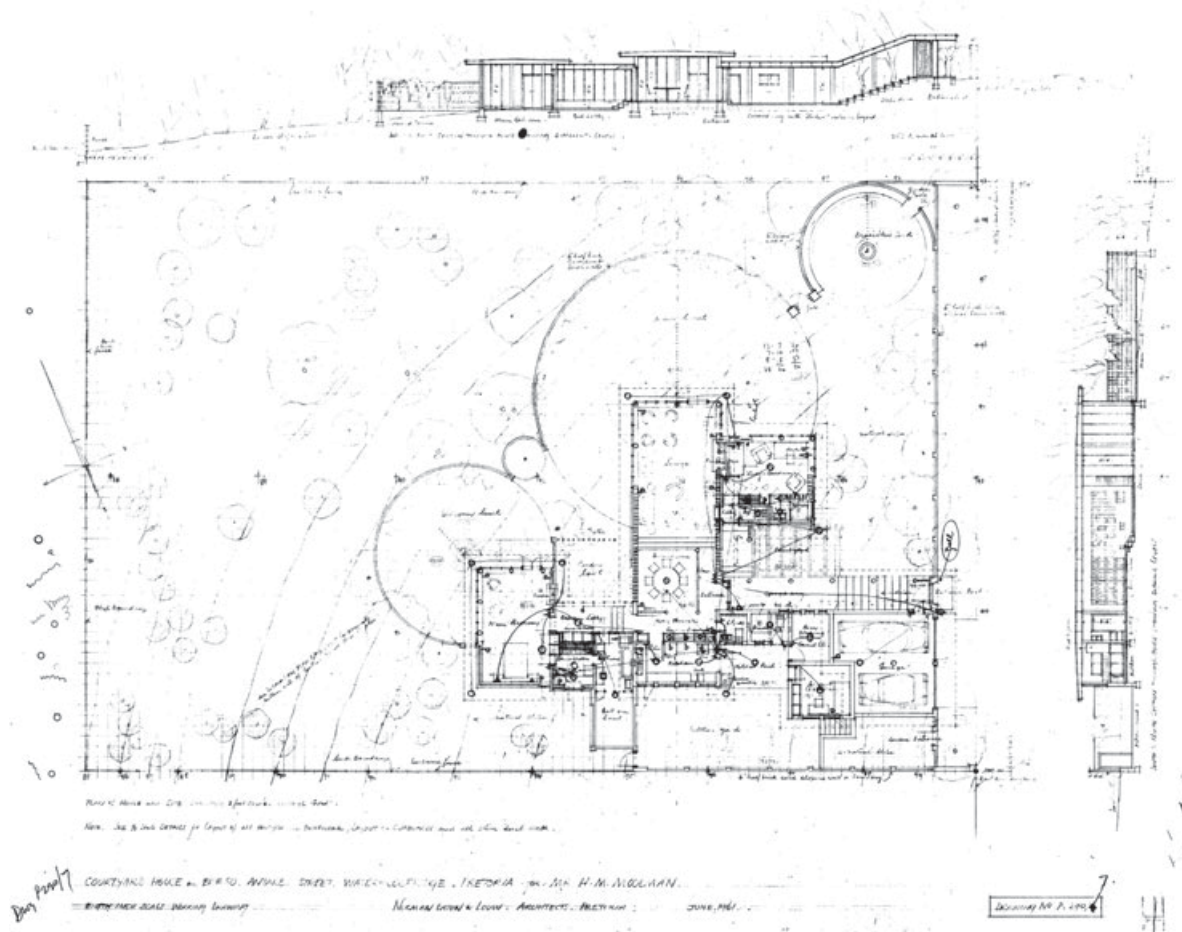


Figure 113 (top): House Moolman/the Courtyard House, Antares Street, Waterkloofrif, Pretoria (1961). The drawing above shows the plan to section/elevation relationship. **Figure 114 (bottom): House Moolman/the Courtyard House, Antares Street, Waterkloofrif, Pretoria (1961).** The detail drawing is of the delightful paving of **geometrical brick patterns**.

Title Courtyard House for Mr. Moolman*

Location Erf no 80, Antares Street, Waterkloof Ridge, Pretoria

TOPi Reference number(s) 07511

Date(s) as per drawing(s) 'June 1961', 'November 1961'

Keywords Residence, courtyards, brick floor carpets, Pretoria Regionalism, Modern Movement

Signed Norman Eaton & Louw Architects

The Moolman House is situated on a steep slope in Waterkloof Ridge and in its spatial diagram, bears some resemblance to the house for Esias Bosch (1961). The client had apparently asked for a secluded courtyard house and a textured overall look (Harrop-Allin, 1975:84).

Eaton placed the house on a level area close to the street that is entirely hidden from view with a garden wall. The house steps along the incline of the site as it meets the street level. Essentially a series of interconnected courtyards, entrance is along a covered walkway along the first courtyard space. A second garden court separates the main bedroom from the rest of the house. A vertical garden brick screen, similar to the one at the Little Theatre and for the Bosch house, cuts across the site from east to west in a series of semicircular geometrical curves of varying dimension. One contains a small pond, while another holds a *braaivleisarea*. These semicircles, no longer sinuous as in the recent past, but geometrical, recall African kraals and attest to the individualism Eaton had grown into. The house opens onto this series of semicircular kraals, with large glazed windows and doors. The extensive use of corner windows allows for a layered permeability to the design.

According to Harrop-Allin (1975:85), all external walls are of roughly textured dark clinker brick, contrasting the glass pavilions of the house and the pristine white interiors.

Brick surface 'carpets' that bind inside and

outside, of geometric pattern layouts, are documented in careful hand drawings, recalling African motifs of weaving and making. The drawings of the brick carpet are testimony to the attention given to the laying of each brick, consideration in variation of colour and geometric patterning.

For other detailing not reflected on the drawings, we will have to rely on Harrop-Allin's description, as the house have been much altered in recent years.

1962

Title House Laurence Scully*

Location Johann Rissik Drive, Waterkloof Ridge, Pretoria

TOPi Reference number(s) 08505

Date(s) as per drawing(s) 'March 1962'

Keywords Residence, Modern Movement, glass house, Van der Rohe, Johnson

Signed Norman Eaton Architect

House Scully was designed for well-known artist and art-teacher, Laurence Scully and his wife.⁴⁵ It is unlike any in Eaton's lineage – most probably as a result of the client's unique brief. Drawing rather from Philip Johnson's (1906–2005) Glass House (1949), New Canaan, Connecticut, USA (which in turn had been inspired by Mies' Farnsworth House (1946), Plano, Illinois, USA), Eaton placed solid functional spaces centrally. Surrounding space was opened up completely to suggest an endless spatial flow, pressing the surrounding space close to a glass envelope and nature beyond.

Eaton had made careful notes on the drawing stating that the site was 'to be developed as a rather dense wood of indigenous Transvaal trees and shrubs with clearings in the way shown' –

⁴⁵ For an introduction to Scully, refer to Appendix B.

apparently, Mrs Scully was a wonderful gardener. Like the two historical glass houses, Eaton used nature for privacy. An un-plastered wall creates a buffer along the southern street edge. On the interior, the wall creates vertical space for art works, as demonstrated on his section drawing.

Similar to the glass houses, the core of the house is made up of bathroom, fire-place and kitchen, almost treated as a piece of furniture despite being part of the structural support. The round swimming pool reads as an object held within a static space. Along the eastern edge of the site, Eaton placed all other functions, with a small projecting glass box for guests. Similar to Houses Moolman and van der Berg, walls extend beyond the house and terminate with vertical articulation.

A very interesting feature of the house, is the addition of a future roof shelter of green canvas above the floating, flat concrete roof. It seems that Mrs Scully had told Eaton that she wanted

the house to have the feel of ‘an Arab tent and wanted to be able to gaze at the stars ... an idea my father loved, and which explains the canvas covering’.⁴⁶ The canvas takes on a conventional tent form, but also resembles a traditional pitched roof, creating an interesting metaphorical reference between permanence and temporality and between signified, and signifier.

The house evidently built on the *erf* subsequently is a watered down version of the original design for the Scullys (who had never proceeded with the project, perhaps as a result of budgetary constraints). Intriguingly, some features from

46 In conversation with Anna von Veh, the Scully's daughter.

47 A verb from the pseudo-Tuscan style that currently dominates the area where Eaton's house for Laurence Scully was built. Many old Pretoria houses have been given Tuscan face-lifts in recent years, with the additions of double stories, Harvey-tile roofs, porte cocheres, cobble stones, decorative Tuscan or classic columns, decorative pink plaster and paint work, lavender pots and arches.

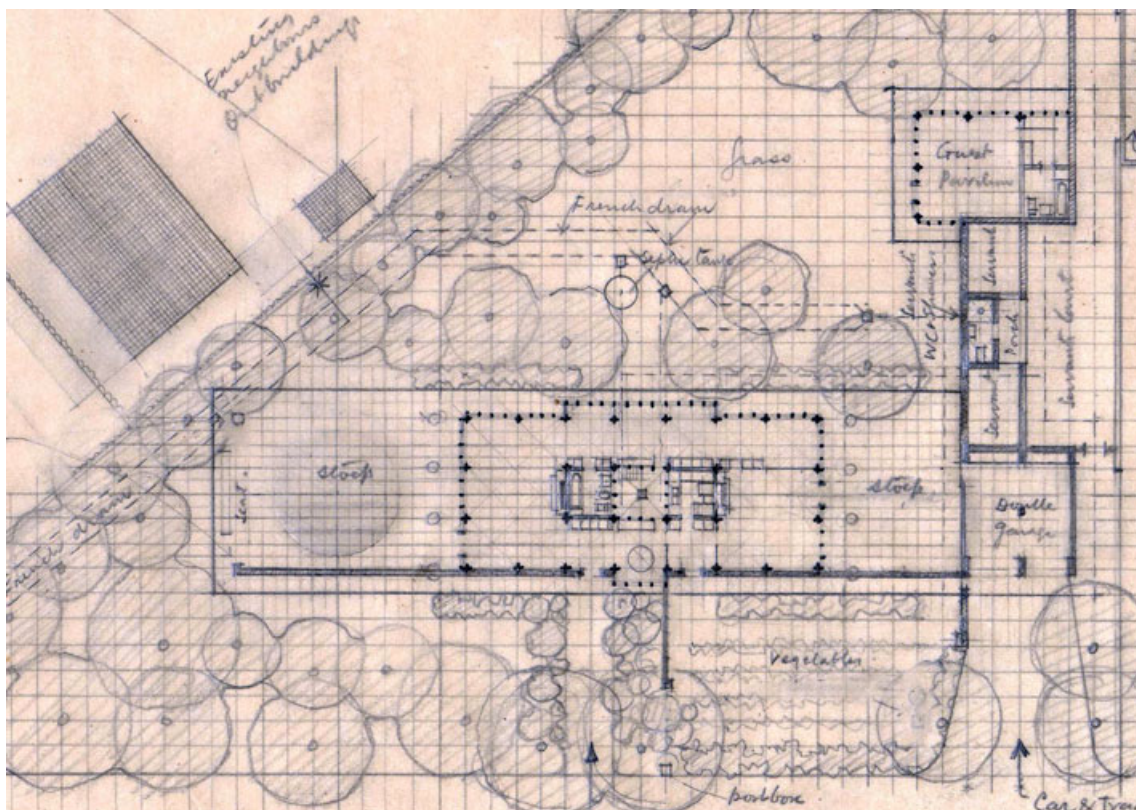


Figure 115: House for artist Laurence Scully*, Waterkloof Ridge, Pretoria (1962).

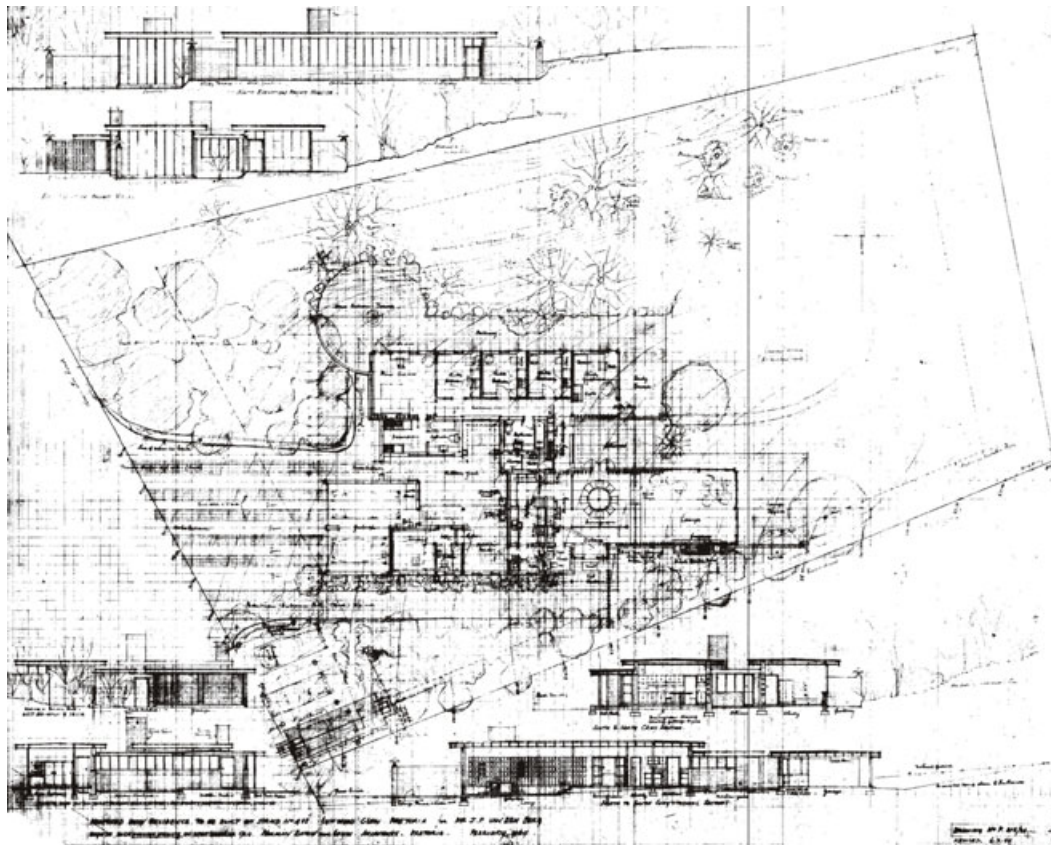
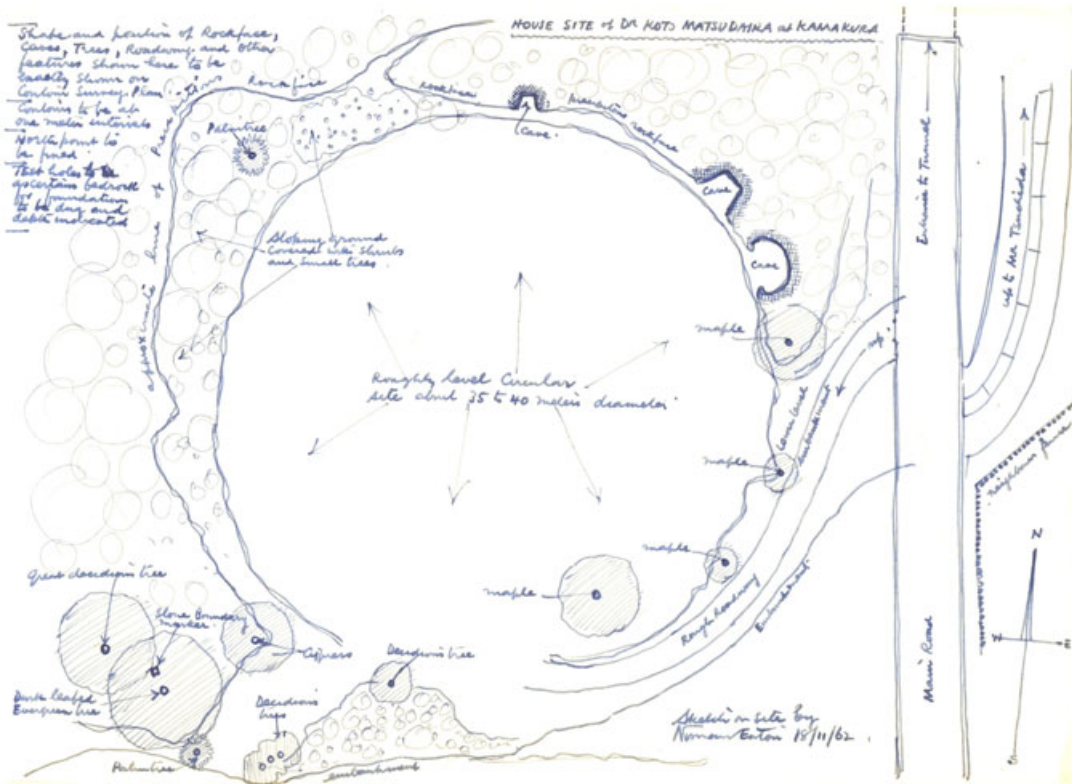


Figure 117 (top): Survey drawing by Eaton of the 'House for Dr Koto Matsudaira', Kamakura, Japan (1962).
Figure 118 (bottom): House van den Berg*, Clearwater Road, Lynnwood Glen, Pretoria (1964).

1963

Title Alterations and Additions for House Murray (1939)* originally by E. Schwartz, later House Loubser

Location Silver Street, Muckleneuk, Pretoria

TOPi Reference number(s) 07864

Date(s) as per drawing(s) 'August 1963', 'January 1964'

Keywords Alterations, Additions, existing house
Signed Norman Eaton & Louw Architects

Original very simple house by architect E. Swartz, later additions and alterations well documented for Mr Loubser during 1963.

Title Residence Camerer

Location Saxonwold, Johannesburg

TOPi Reference number(s) 07534

Date(s) as per drawing(s) 1963

Keywords Residence
Signed Norman Eaton & Louw Architects

A measured site layout for the new Residence Camerer, in Saxonwold, Johannesburg.

1964

Title House van den Berg*

Location Clearwater Road, Lynnwood Glen, Pretoria

TOPi Reference number(s) 07509

Date(s) as per drawing(s) 'February 1964'

Keywords Residence, Modern Movement, Pretoria Regionalism, Neutra, African influences
Signed Norman Eaton & Louw Architects

The Van den Berg House was built shortly before Eaton's death. In his brief to Eaton, Mr van den Berg stipulated that he wanted "architecture", not just a home' (Eaton Diary Entry 20/12/63). The horizontal character of his design is

more evident than ever. Roof planes hover over the house. The corrugated sheet roof is the first element visible from the elevated street, with aesthetically pleasing and insulating reddish brown tiles covering the corrugations. The house is 'a combination of the transparency and smoothness of large glazed surfaces with the roughness of textured brickwork' (Harrop-Allin, 1975:89).

Very similar to the courtyard house, the design essentially consists of two pavilions that are interconnected with a bathroom and passage. The house is more compact due to the constraints of the site. One pavilion holds the bedroom and study, the other the living spaces. Open spaces in-between form a kitchen courtyard and small atrium. Uniform, simple brick paved floors become a horizontal carpet to bind the whole scheme together – extending into the landscape in the form of long continuous strips. The open glass pavilion-like appearance of the living room, split-level and expanses of repetitive wall recesses are very similar to the Moolman House.

Allusions to African motifs are restrained, yet multiple: Mat-like bamboo screens, supported by untreated wooden poles separate the dining area from the entrance lobby and kitchen entrance. Screen walls extend from the house in Miesian character, with rectangular piers topped with simple conical lanterns articulating each termination. A singular circular screen wall to the north contrasts the angularity of the design. Along with a singular freestanding cylindrical brick drum outside the kitchen garden, these make up the allusions to African form. Interconnected courtyards with linked pavilions, recall Ndebele settlement. The combination of vertical and horizontal textures on various scales is carefully considered to give the house the appearance of having been woven like an African basket.

Eaton had again applied the grid derived from steel window modules to order the overall composition – giving the complete composition a dis-

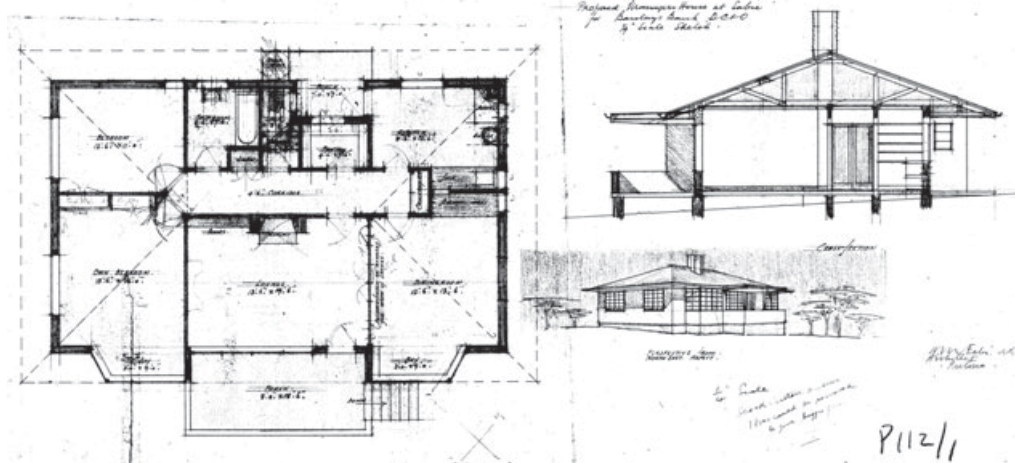
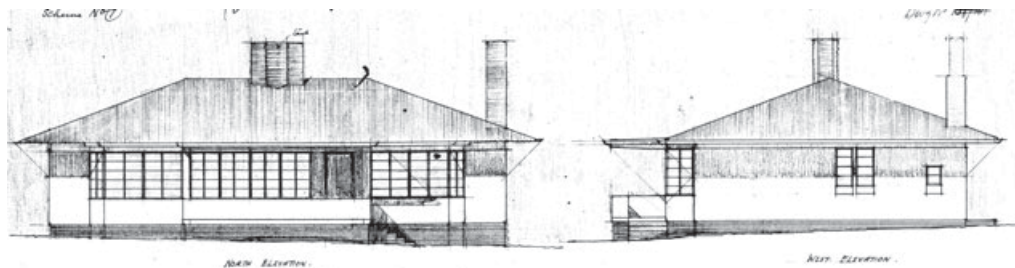
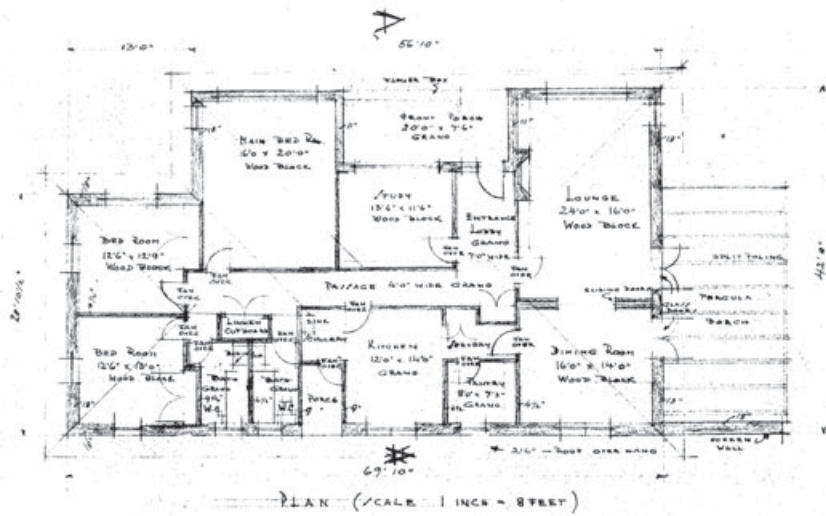


Figure 119 (top): House Bonsma, Pretoria (no date).
Figure 120 (middle): House for the Manager for Barclay's Bank, Sabie (no date).
Figure 121 (bottom): House Spence, Church Street, Arcadia, Pretoria (no date).

ciplined appearance. While the house bears some resemblance to Neutra's Kaufmann Desert House (1946–1947), Palm Springs, California, Eaton has truly come into his own. Neutra's design is restrained and elegant, sun and light modulated and screens of plants sensitively articulated between building and context. The horizontality of the Kaufmann house is expressed in the series of flat, projecting roofs, and the use of floor to roof glass partitioning to create seamless integration between inside and outside. Eaton employs similar devices, but together with the attention to textures, repeating at different scales and careful selection of materials and restrained formal allusion to Africa, the house is a true hybrid of an African modern idiom: occupying the metaphorical space between Africa and the West.

Drawings in the UP Repository do no justice to the rich spatial quality of this house. At the time of writing this document, only minor alterations had been done to the original structure.

Title Alterations and additions to Farmstead Taute
Location Oudtshoorn, Western Cape
TOPi Reference number(s) 07514
Date(s) as per drawing(s) 'August 1964'

Keywords Alterations, additions, existing residence
Signed Norman Eaton & Louw Architects

Projects without dates

Unlike Eaton, the following series of drawings do not bear a date. They are in no particular order:

Title House Bonsma
Location Pretoria
TOPi Reference number(s) 07747
Date(s) as per drawing(s) No date

Keywords Residence, *rondavelhuis*
Signed None

Probably early 1930s to 1940s. Perhaps 1944, drawn on back of details of earlier House De Loor.

Title House for the Manager for Barclay's Bank
Location Sabie
TOPi Reference number(s) 07829
Date(s) as per drawing(s) No date

Keywords Residence, *rondavelhuis*
Signed N.M. Eaton ARIBA Architect

Probably early thirties, the project nr 112

Title House Spence
Location Church Street, Arcadia, Pretoria
TOPi Reference number(s) 07585
Date(s) as per drawing(s) No date

Keywords Residence, Modern movement, Wright
Signed Norman Eaton ARIBA Chartered Architect

Project 68. Very similar to House Lodder and others from the later 1930s.

Title House Rissik

Location Arcadia Street, Pretoria; Fife Street, Houghton, Johannesburg

TOPi Reference number(s) 07743

Date(s) as per drawing(s) No date

Keywords Residence, Modern movement, Wright
Signed Norman Eaton ARIBA Chartered Architect

Alterations and additions for same client, advocate U.P. Rissik.

Title House Kupferberger

Location Brooklyn, Pretoria

TOPi Reference number(s) 07735

Date(s) as per drawing(s) No date

Keywords Residence, Modern movement, Wright, 'Streamline *Moderne*', flat roof
Signed Norman Eaton ARIBA Chartered Architect

An interesting house, with flat roof and a 'covered loggia on flat roof'; most interesting is that the proposal was for a swimming pool over the entrance porch and lobby, creating a stepped section. Other noteworthy elements include a winding stairwell, exposed brick and a 'Streamline *Moderne*' mast. Probably done in the early to mid-thirties, the design oscillates between Wright on the one hand and *Art Deco* on the other. In fact, the plan reminds one compellingly of Wright's Blossom house (1892) where a 'semi-circular entry porch is countered by a semicircular conservatory placed in an opposing and non-axial position – causing a rotational movement in the plan' (Laseau, Tice, 1992:54).

Not dated, but it was amongst many other drawings all dated 1936.

Title Berea Cottage

Location Pretoria

TOPi Reference number(s) 07538

Date(s) as per drawing(s) No date

Keywords Attic conversion
Signed Norman Eaton ARIBA Chartered Architect

A new attic for Sister C.C. Hiebendaal. The detailed drawing is not dated, but amusingly includes a caricature of Sister Hiebendaal in the attic section.

3.4. Summary of the three periods defining Eaton's domestic *oeuvre*

Three periods are distinguished in Eaton's domestic design *oeuvre*. Similar to other master architects, he carried a residue of ideas forward to other projects over many years, building a genealogy of design vocabulary over time.

3.4.1. Summary: 1930–1940 Pre-War Period

At the outset of his career, Eaton was working within the Arts and Crafts and Cape Dutch-inspired idiom, towards an appropriate vernacular for the *Afrikaanse Woning*. While he continuously referenced both movements (throughout his career), he would increasingly foster a non-stylistic approach in search of an authentic South African architecture, hailing the appropriateness and simplicity of Cape Dutch architecture and the craftsmanship of the Arts and Crafts rather than its aesthetics or as an 'application' as styles. This search would culminate in what Harrop-Allin later referred to as 'a romantic and organic expression' (Harrop-Allin, 1975:31).

His first modern endeavours from 1934 onwards displayed a departure from the designs of his doctrinaire peers. While early designs displayed box-like verticality, he gradually started to emphasize horizontal planes in a Wrightian manner, with low-pitched roofs and deep over-

hangs. All the aspects that characterize Pretoria Regionalism⁴⁸ are already manifest in his early work.

A summary of the critical moments in residential work from this period:

- Eaton used a letter-type plan typology with its attendant attributes often during this period, a typical Pretoria Regionalist trait and often the result of the use of thatched roofing material.
- Eaton increasingly fostered a non-stylistic approach, but his very first endeavours included stylistic allusions, seen in for example, the twisted chimney detailing of his early cottages, decorative timber trusses and ‘Streamline *Moderne*’ references. However, it is noteworthy that such elements were not ‘applied’ randomly, but were used as design devices for articulation of hierarchy or function, or as carefully considered compositional tools.
- Arguably, the Van Wouw House (1937–8) would be the best representation of a culmination of the ‘romantic and organic expression’ (Harrop-Allin, 1975:31) associated with the Arts and Crafts, Cape Dutch and the search for an appropriate language for the Highveld.
- This period is also characterized by his first unrestricted response to the Modern Movement: flat-roofed, simple cubic masses as seen for the first time in Houses Boyes, Kleyn, the Nigel housing prototype, houses Gascoyne and Nicolson, all dating from 1934.
- Unlike the pure machine-aesthetic of the International Style, brickwork was often bagged, or left un-plastered, strip windows protected with extruded ledges and the houses were all oriented to north for best climatic exposure.
- House Viljoen (1934) was the first of the modern houses to be introduced with a pitched roof, at this point still with no overhangs; while

House Rademeyer (1935) departs most clearly from the machine-aesthetic, with a pitched roof, overhangs, symmetrical front facade and bagged and plastered walls.

- Two houses that were unlike any in his lineage, are Houses Smit (1936) and Tosi (1938). The first recalled Moerdyk and the second was a Citrohan derivative with regional references. House Tosi was done at the same time as the Arts and Crafts-like House van Wouw and the Wrightian-inspired House Fischer.
- Reflected in all aspects of Eaton’s domestic planning, the loggia, stoep or veranda as inside-outside room, appears in the majority of his domestic work; while outside yard space is increasingly defined as part of the overall ensemble. The latter is either defined with pergolas and low walls as seen in Cape Dutch architecture, or with site binding walls in the Wrightian manner.
- A sense of arrival would be established through careful consideration of defining hierarchies of space.
- Eaton would also start to employ attenuated plan layouts to optimize climatic performance, continuously growing more into an organic architectural approach as perhaps best exemplified in House de Loor (1938).
- ‘Faggoting’⁴⁹ tiles were used for the first time in House Kling (1936). These tiles are not the same as the ones he would later use to render surfaces in Bank buildings.
- With House van der Merwe (1940), he consciously evoked indigenous bead and basket work for the first time in residential work.

Public work from this period, whether alterations to an existing structure or a new building, carefully considered climate, material choice, light-

⁴⁸ Refer to Appendix C.

⁴⁹ See entry for House Kling.

ing and ventilation. Similar to his domestic work, early public works bear the *gestalt* of the 1930s with articulated staircases, horizontal emphasis on windows, porthole windows, rounded edges for alcoves and flag staffs.

The major difference in design approach between residential and public work, is a more formal and disciplined design approach, especially concretized in the first Land Bank, Ermelo (1940).

3.4.2. Summary: 1941–1945 War Period

Building Controls had a direct impact on house designs of this period. The design traits of these houses would herald some of the attributions towards the establishment of a Pretoria Regionalism/Third Vernacular.⁵⁰

- Dwellings all seem to have the same ‘romantic’ spirit that Harrop-Allin had later ascribed to Ygdrasil (1975:37).
- All houses are furnished with thatch roofs, most seemingly with bluegum poles and plastered split-pole ceilings.
- Resultant attenuated plan forms, oscillating between the traditional letter-type and elongated rectangular schemes, with increasingly complex site layouts and extended horizontal fields, often defined in randomly laid slate tiles also occurred.
- Again, the loggia, *stoep* or veranda is an inside-outside room. Large outside perimeters and yards are defined with terraces, plants, horizontal surfaces rendered in slate and defined with pergolas or even vineyard trellises.
- Indigenous trees and shrubs, garden terraces and fountains form an integral part of the overall site motif, with sensitivity to land features.
- House configurations recall Moerdyk’s *rondawelhuis*, while compellingly similar to African villages in the use of repetitive roofs at various heights.
- A set of beautifully crafted working drawings

from House Connell O’C Maggs (1945), Na-boomspruit, stand out from this period with bluegum pole details, wall plate details, double rafters, scissor truss details and even mosquito net detailing.

House Connell O’C Maggs would be the last house for a few years. The design for the ambitious Ministry of Transport building (1944–1948) would take up most of Eaton’s time from 1944 onwards. Flat roofs in his non-residential architecture would be seen for the first time, with roof gardens introduced along with Brazilian influences. The application of an underlying three-dimensional grid derived from standardized building components, not yet used in his domestic work, manifests in his non-residential work.

African influences as textural differentiations are rendered in his Bank buildings, most significantly in the Land Bank Buildings in Potchefstroom (1941) and Kroonstad (1944) respectively.

3.4.3. Summary: 1946–1966 Post-War Period

Sublimation of African qualities now found expression in all aspects of Eaton’s work, particularly visible in his alternative use of bricks. While there are still references to Wright, Niemeyer, Marx, and later, nuances of Neutra and van der Rohe, Eaton had truly come into his own as a master of his trade. His work displays a strong relationship between nature and the man-made, inside and outside, heaviness and lightness, structure and texture.

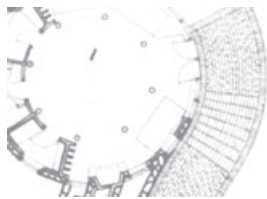
Typical of houses from this period, contributing significantly to the establishment of the Third Vernacular, are:

- Flat roofs with deep projecting eaves, or alternatively thatch or sheet metal with deep projections.

⁵⁰ Refer to Appendix C.

- Rubble stone or simple, rustic brick aesthetic for walls.
- Complexity in plan, section and site motif; with hierarchical differentiation in varying levels that respond to the site, complemented in material use.
- Rectilinear dwellings, always north facing, often contrasted with controlled, sinuous lines that make up a horizontal field and later replaced with geometrical circular motifs.
- Extended, horizontal fields with richly decorated brick paving (especially *rondel* formations) gained preference over slate paving.
- Sometimes Cape shutters in front of windows for protection – significantly where doors provide direct flow between inside and outside (windows replaced with doors to provide direct contact with outside).
- Boundaries between inside and outside have now become blurred, with the use of floor-to-ceiling glass, and extended perimeter or inside-outside field, not only reserved for living rooms, but also applied to bedrooms.
- Spatial connectedness to landscape further enforced by overall horizontality, material use, grounding and a sense of weight of facade.
- Grid three-dimensionally derived from window modules, unit system as simple ordering device for all aspects as a 'whole'.
- Indigenous trees and shrubs, garden terraces and fountains would form an integral part of the overall site motif.
- Juxtaposition of forms that are more individual, rigours of didactic form give way to warmth, richness and emotion, complemented by careful rendering of materials and textures.
- Allusions to Africa in formal response, detailing and textures, especially prevalent in Houses Greenwood (1948–1953), the Greenwood Village (1950–1951), Houses Andersen (1949–1950), Holsboer (1954), Heystek (1957), house design for the Australian High Commissioner (1959), House and Studio Bosch (1961), House Moolman (1961) and finally House van den Berg (1964).
- The unexecuted design for House Scully (1962) is the only one at odds with the overall lineage of his work.
- Drawings in the UP Repository often do not do justice to the spatial richness and quality of executed houses, especially true for Houses Anderssen (1949–50), Greenwood (1948–51) and Van den Berg (1964).

Non-residential work from this period displays translations of Brazilian to an African sensibility, with careful considerations for climate, material choice, lighting, and ventilation. Almost all buildings are rendered in a simple brick aesthetic in repetitive horizontal courses, horizontal strip windows with protecting ledges or smaller scaled projecting fins on a grid, later translated into a filigreed screen for appropriate application. Custom-made bricks and glazed tiles intentionally evoke African textures with the austerity of stereometric structures in opposition to fine surface treatment.



CHAPTER 4

VISUAL DISTILLATION OF MOTIF, AFRICAN TRANSLATION AND TYPOLOGICAL LINEAGE

At the outset of the investigation, the primary question asked was: **Why and how does the domestic architecture of Eaton express its lineage of forms, space, material and detail?**

The first part of the question, relating to ‘**Why** does the domestic architecture of Eaton express its lineage of forms, space, material and detail?’ was primarily answered in Chapter 2.

The second part of the question, namely ‘**How** does the domestic architecture of Eaton express its lineage of forms, space, material and detail?’ was partially addressed in Chapter 3.

The discoveries made in Chapter 3 are collectively extracted and reviewed under three headings in this chapter:

- Visual Distillation of motifs
- African Translations
- Typological lineage

4.1. Visual distillation of motifs

A ‘motif’ is a distinctive feature or dominant idea in an artistic, literary, or architectural composition. The following series of motif sheets highlight a pattern of ideas that may serve different conceptual purposes in different works. Each sheet extracts motifs from Eaton’s work in relation to the work of others. Motif sheets are chronologically arranged.

While the focus of the motif sheets is on Eaton’s drawings, photographs of completed buildings or details are sometimes included to demonstrate aspects that are not clear in the drawings.

MOTIF SHEET 1—Cape Dutch, Arts & Crafts, Romanticism, regionalism, local climate, semi-circular projections

MOTIF SHEET 2—Modern Movement, expressionist semicircle, machine age

MOTIF SHEET 3—Modern Movement, regionalism, local climate, Pretoria, Gordon McIntosh, 1930s

MOTIF SHEET 4—Modern Movement, semi-circular Expressionism, Van der Rohe, Neutra, Wright

MOTIF SHEET 5—Modern Movement: Johannesburg residential buildings

MOTIF SHEET 6—Le Corbusier’s Citrohan derivatives, Martienssen’s projecting frame

MOTIF SHEET 7—Single-storey corridor pavilions, Stauch, Nunn, Wright

MOTIF SHEET 8—Moerdyk, Art Deco, Afrikaner-African idiom

MOTIF SHEETS 9–10—Frank Lloyd Wright

MOTIF SHEETS 11–12—Brazil Builds, Aalto, Stauch, texture, sinuous lines

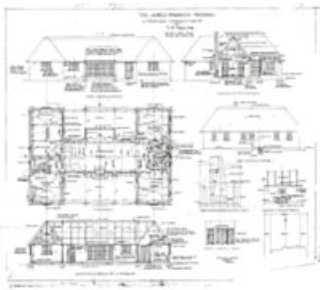
MOTIF SHEETS 13–14—Italian Renaissance, classical order, controlling lines, ornamentation

MOTIF SHEET 15—Pretoria Vernacular – Johannesburg Vernacular

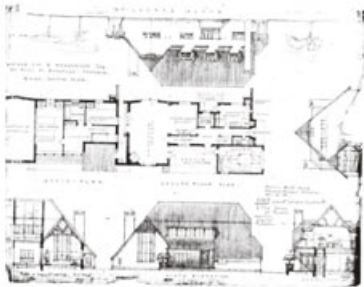
MOTIF SHEET 16—University of the Witwatersrand: Context for Eaton’s new Administration Block (1964)

MOTIF SHEET 17—The last four houses, Africa, inter-connected courtyards, formal relationships, Neutra, Van der Rohe, Johnson

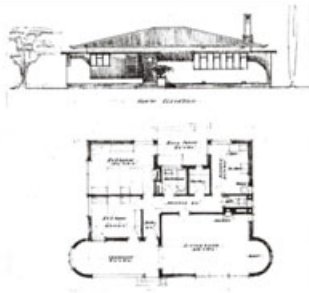
Drawing of project by Norman Eaton
(Eaton Collection UP Repository)



'The Laurels' Cottage for Mr Price (above), 1930; similar house types include Farmstead Hill (1932), Cottage Collender (1933), Cottage Boyes (1933), House Von Sonn (1933), House Cooper (1936), House Van Wouw (1936), House Hamilton (1938).



Cottage Moggeridge (above), Brooklyn, Pretoria (1933), similar analogies can be made to for example Cottage Boyes (1933), House von Sonn (1934), alterations to House Turvey (1934), House Van Wouw (1938), House Hamilton (1939).

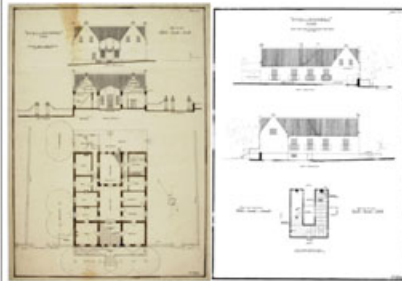


Cottage Smook (above), Sunnyside, Pretoria (1933) with projecting semicircles towards the formal front of the house, and floating roof.

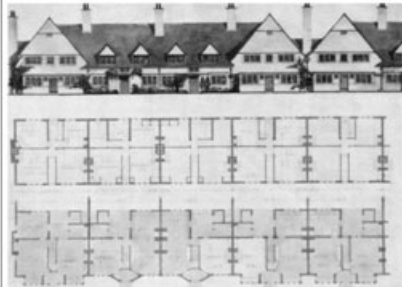


Above: A watercolour by Eaton (1930) which was done of his meticulous measurement of the Roman Baths at Ostia, Rome. Note the amalgamation of forms, especially the semicircular projections.

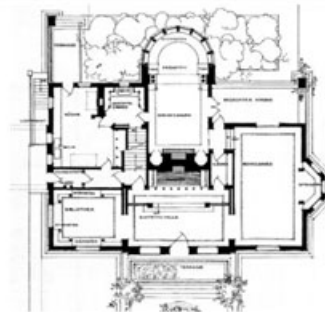
Analogy - as referred to in text



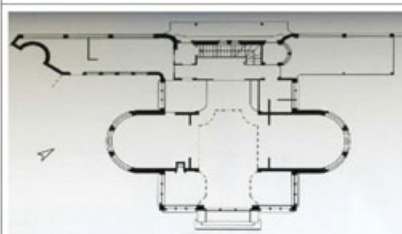
House Stellenberg, Wynberg, Western Cape, for the publication Eighteenth Century Architecture in South Africa (Cape Town: A.A. Balkema, 1933) by Pearse, as drawn by Eaton as a student in 1928 (Eaton Collection UP Repository).



Typical Arts & Crafts architecture: Workmen's Institute and Cottages at Whitwood, Miners' cottages, Normanton, Yorkshire, 1904, for Henry Briggs & Son by Charles Voysey (1857-1941)(Plan and elevation RIBA Drawings Collection).



Plan of the Winslow House, River Forest, Ill. 1893, by Frank Lloyd Wright (<http://en.wikiarquitectura.com/index.php/Winslow> [Accessed: 10/01/2013]).



Above: Plan of the Villa Schwob (1916), called 'Turkish village', La Chaux-de-Fonds, Switzerland (Source: wikiarquitectura buildings of the world). In a letter dated in June 1920, Le Corbusier saw House Schwob as 'the starting point for a new program that incorporates the memory of travel'. Another quote from the letter reads 'I am devoted to serious work, including scientific, and paintings that are at least equal to Schwob Villa...But above all I look at the Parthenon and Michelangelo...a reliable art. And the temperament changed: a new model, the Parthenon, this drama' (http://en.wikiarquitectura.com/index.php/Villa_Schwob [Accessed: 10/01/2013]). According to wikiarquitectura '...the space that connects the entrance to the two storey living room can be compared to sketches made in 1911 in Pompeii, and seems to reproduce the distribution of the 'village of Diomedes' around the atrium'. The structure of the house draws from Palladian villas, and stylistic elements drawn from Perret, Hoffmann and Tessenow (Frampton, 1992:151).

'n Huis vir 'n warm distrik



Gerhard Moerdyk: the plan of the huis vir 'n warm distrik [house for a warm district] as originally published in Die Boerevrou (1924, 1989:33).



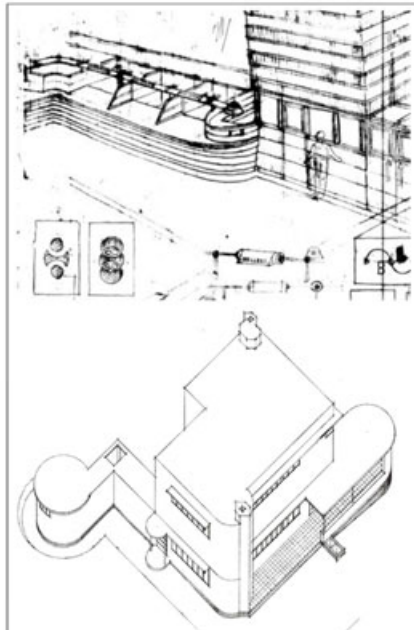
Typical Arts & Crafts architecture: Design for Broadleys, Windermere, for Mr A. C. Briggs by Charles Voysey (Frampton, 1992:49).



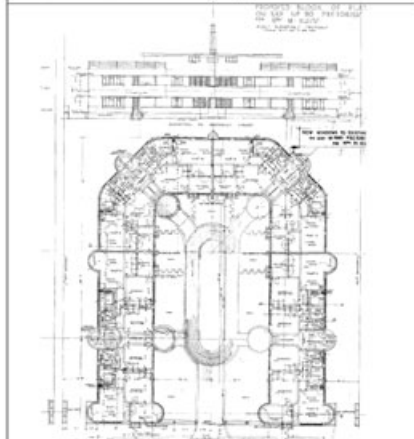
The above drawing of the Winslow House was prepared in 1910 for use in the portfolio of Wright's drawings published in Germany by Ernst Wasmuth. Drawing copyright © 1985 the Frank Lloyd Wright Foundation available at <http://www.franklloydwright.org/about/FLLWBio.html> [Accessed: 12/01/2013]).

KEY WORDS: **Modern Movement, Expressionism, semicircle, machine age**

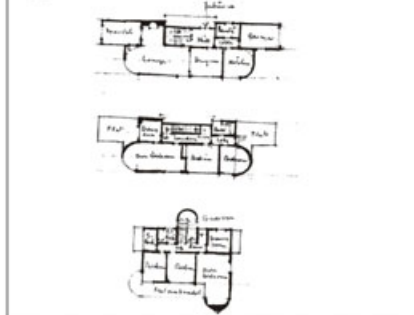
Drawing of project by Norman Eaton
(Eaton Collection UP Repository)



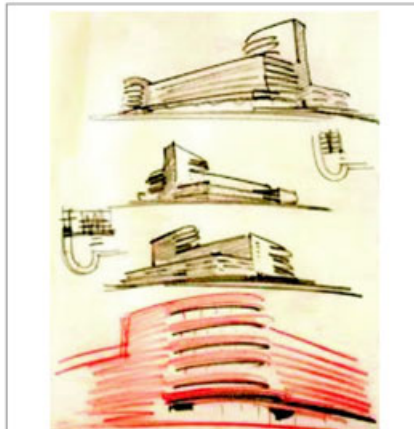
Above top: Freehand expressionist drawings and detail exploration by Eaton for the alterations to **Barclays Bank** (Dominion Colonial & Overseas), East end Branch*, Church Street East, Pretoria (1932).
Above: Eaton's redrawn sketchplans for **House Boyes**, Brooklyn, Pretoria (1934). Forms are reflections of internal functions, also denoting hierarchies of expression, and are therefore not merely applied.



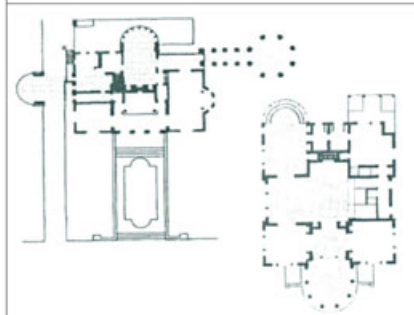
A very different application of expressionist form: **Block of flats** by Eaton, to be erected at nr 90 Pretorius Street (1934) and **below:** Eaton's design development exploration of the **Nigel houses** from 1934.



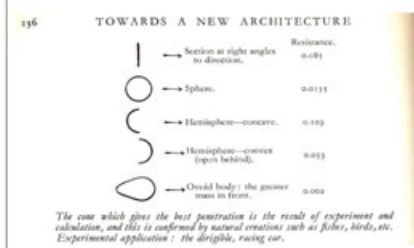
Analogy - as referred to in text



Right: The Queen Victoria Maternity Hospital, 1943, by Gordon Leith. (Chipkin, 1993:145).
Below: One of the buildings that Eaton visited: the Karl Marx hof in Vienna, Austria (1927-1930) by Karl Ehn (Eaton Collection UP Repository).



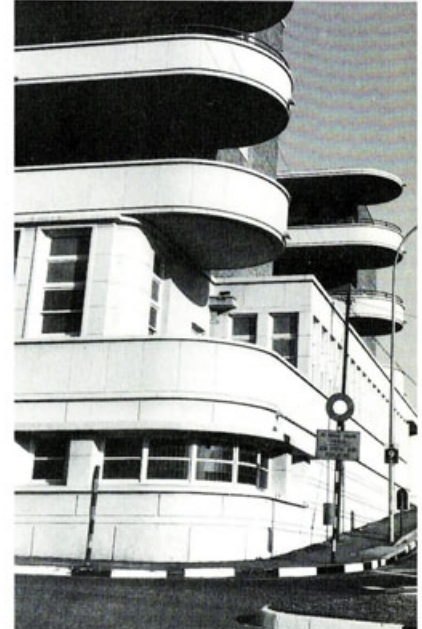
Above: The Blossom and Winslow Houses of Wright, showing the implied pin-wheel organization and semicircular projections expressing the termination of each axis (Laseau, Tice, 1992:86).



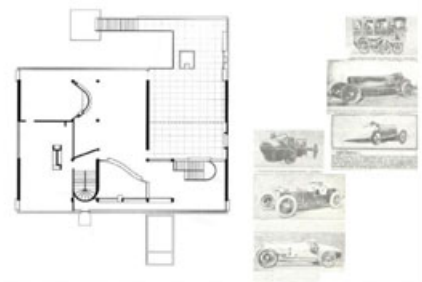
Above: From Le Corbusier's *Vers une architecture [Towards a New Architecture]* (1927; 1974:136), showing his use of metaphor for the machine age, such as the ship and automobile and above right: Le Corbusier and Jeanneret, plan of Villa de Monzie, Garches, 1927 (Frampton, 1980; 1992:157).



Above: Sketch by expressionist Mendelsohn of the Packhof Building, Germany, 1917 (Image available at www.flickrhivemind.net. [Accessed: 11/01/2013]).
Left: Sketch by Erich Mendelsohn of the Schocken Department Store, Stuttgart, Germany, 1927-1928 (Available at <http://www.all-art.org/Architecture/25-10.htm> [Accessed: 11/01/2013]).



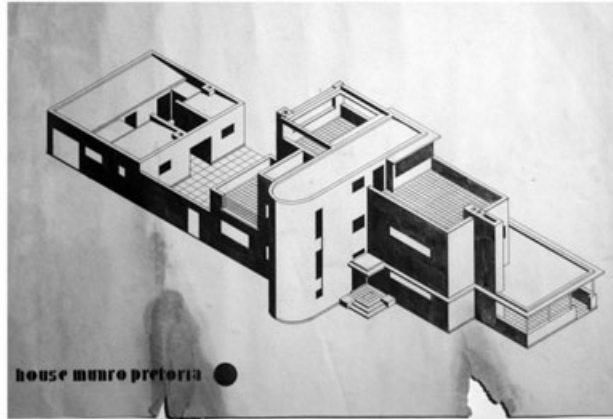
The Mendelsohnian expression had influenced Martienssen who had 'raved about' it in 1930 (Chipkin, 1993:135). Even Leith's attested to the permeation of Mendelsohn's expressionist architecture with similar curved forms (Chipkin, 2008:56), exemplified in amongst others the **Nurses' Quarters** (circa 1934) and his **Queen Victoria Maternity Hospital** (1943) in Johannesburg. Buildings in Pretoria at the time: the Academic Building for the Technikon, by Geers + Geers (1937), would also be *huiwerend tussen Modernisme en Art Deco* (Le Roux, Botes, 1991:46), with the same rounded corner balconies and added circular porthole windows.



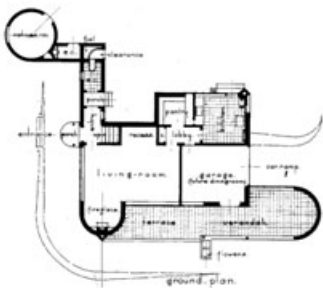
Analogy - as referred to in text



Farmstead Hill (1932) by Eaton was finished the year that McIntosh completed the first Modern Movement house in Pretoria. Farmstead Hill has a symmetrical H-plan with timber and thatched roof. Eaton's House von Sonn (1934), pictured above, was an almost exact replica of Farmstead Hill.



Left: The Munro House in Brooklyn, by Gordon McIntosh was completed during the same year Eaton designed Farmstead Hill. The Munro house was the first modern house to be published in the SAAR, June 1932. The image to the left is from the UP Repository.



Top left : House Boyes (1934) was Eaton's first response to the Modern Movement. Middle: Eaton's design for House Rawlins (1937), Pretoria, with resemblances to Wright's Lloyd Lewis House (1940) and his earlier Coonley House (1907). Top right: His own house (1936-37) in Brooklyn, Pretoria, by Gordon McIntosh from AR, Aug 1940:39. The plan reminds one of the work of Van Der Rohe, the latter especially evident in the site binding walls that contain spaces beyond the building envelope.



House Boyes (1934), Pretoria (above) by Eaton (UP Repository) Exposed brick plinth, ground floor bagged and painted white, first floor plastered and painted, no roof garden, strip windows and a clean aesthetic, Art Deco textured detailing of recesses, stoep/verandah along the north eastern corner, windows are protected with projecting ledges, semicircular expressive projections to articulate functions, planned for cross-ventilation, site binding wall extends to servant's quarters.



House Munro (1932), Pretoria (above) by McIntosh (UP Repository) Plastered and painted, pure white aesthetic of the Modern, with roof garden, strip windows and a clean aesthetic, Art Deco detailing of rain water outlets on facades, stoep along the north eastern corner, windows are not protected with projecting ledges as in House Boyes, lack of surface texture, singular semicircular projection, making it seem less expressive than Boyes House



House Nicolson (1934), Pretoria by Eaton (UP Repository) Facebrick, climatically favourable site orientation away from street, strip windows with protecting ledges, attenuated plan, stoep along the north eastern corner, windows are protected with projecting ledges, semicircular projections, chevron-patterning.

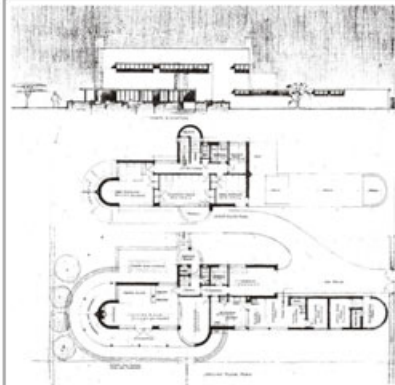


Own house (1936-7), Pretoria by McIntosh SAAR, May 1937: 43 Bag-plastered, large glazed surfaces, a clean aesthetic, stoep along the north eastern corner, windows are not protected with projecting ledges,- reinforced concrete slabs, steel *piloti*, semicircular planter box on ground level, use of colour: cool green loggia, tints of cream and lime green, pale blue ceiling (AR, Aug 1940:39).

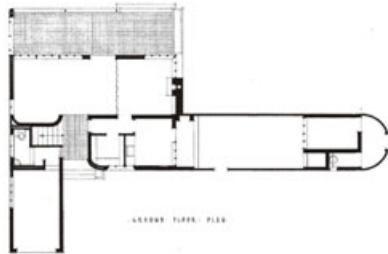
KEY WORDS: **Modern Movement, semicircular projections, Expressionism, Van der Rohe, Neutra, Wright**

MOTIF SHEET **4**

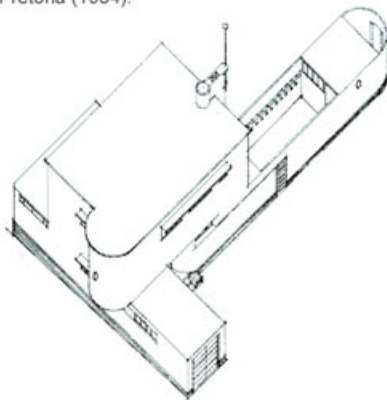
Drawing of project by Norman Eaton
(Eaton Collection UP Repository)



Above: House Kleyn, corner of Edward and Premier Streets, Waterkloof Pretoria (1934).



Above and below: House Nicolson, Brooklyn, Pretoria (1934).

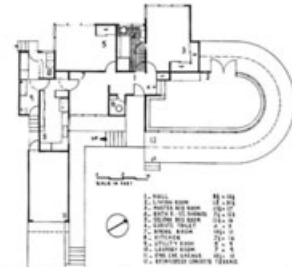
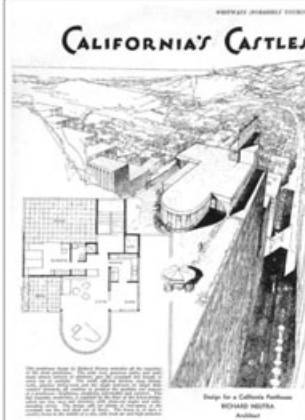


Below: House Frommurze/MacKenzie, Brooklyn, Pretoria (1935). Note the 'disappearance' of the corridor on ground level, and the application of plants to all horizontal ledges.

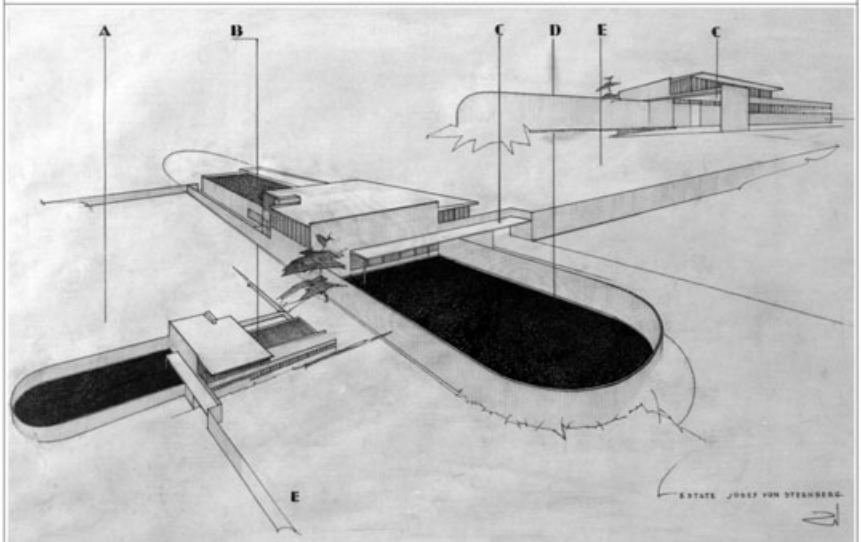


Similar to the Tugendhat House (1930), Brno by Van der Rohe; and the layered, compartmentalized planning of Wright's Robie House (1909), the service block slides behind the main living volume. The free plan is reserved solely for the living volume.

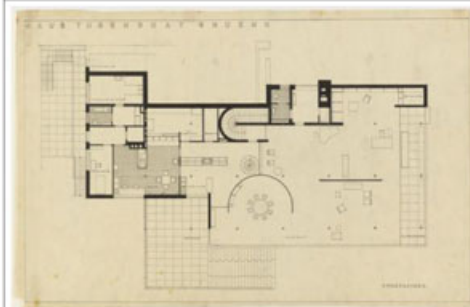
Analogy - as referred to in text



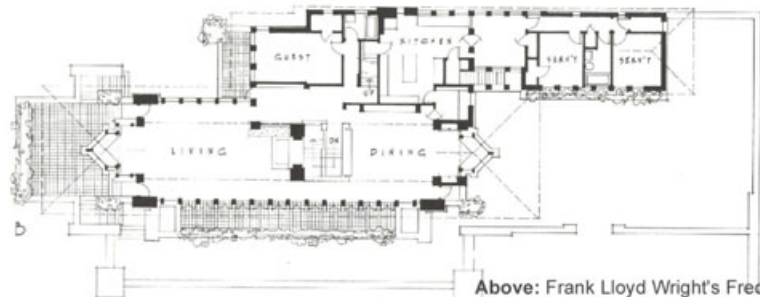
Left: 'Skyline Apartments' Penthouse, Westways, Los Angeles, USA, 1934, by Richard Neutra. Above: Lipetz House, Silverlake by Raphael Soriano, 1936. From Raphael Soriano (1904-1988) by Wolfgang Wagener, Phaidon, 2002 Julius Shulman photo. (Both above images from <http://so-cal-arch-history.com/archives/892> [Accessed 18/01/2013]).



Above: The 'moat' of the Von Sternberg House (1935-1936), by Neutra, Northridge, California, pencil and ink on linen drawing, accessed from the Department of Special Collections, Charles E. Young Research Library, UCLA (Los Angeles Public Library).

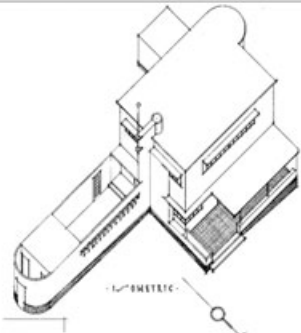


Left: Tugendhat House, Brno, Czech Republic, by Van der Rohe (1928-30) (http://www.moma.org/collection/object.php?object_id=89534 [Accessed 15/02/2013]).

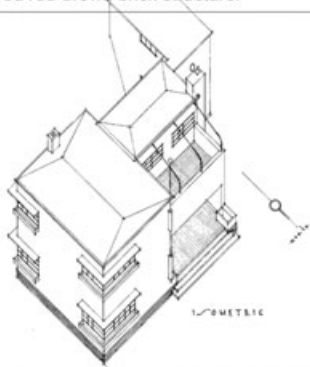


Above: Frank Lloyd Wright's Frederick C. Robie House, Chicago (1909), main floor (Hildebrand, 1991:52).

Drawing of project by Norman Eaton
(Eaton Collection UP Repository)



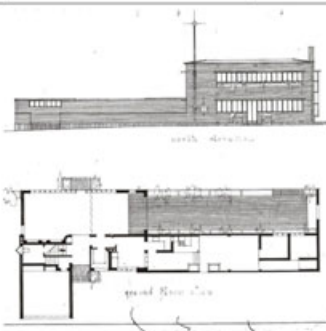
Above: House Nicolson, Erf 609, Brooklyn, Pretoria (1934), Eaton's first completely unplastered red-brown brick structure.



Above: House Viljoen, Muckleneuk, Pretoria (1934) – the first of Eaton's 'modern' houses with a low pitched roof.

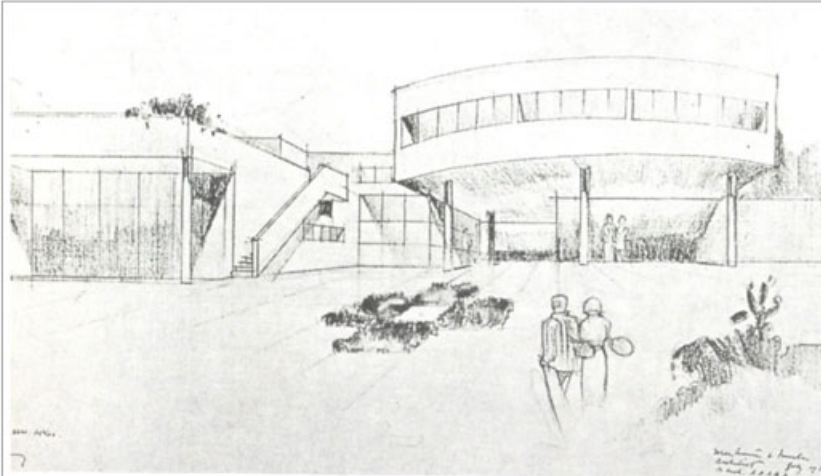


Above: House Rademeyer, Pretoria (1935), thickly whitewashed stock-bricks and a low-pitched roof with flat gabled ends – very different from the forms and a-textural approach of the International Style.

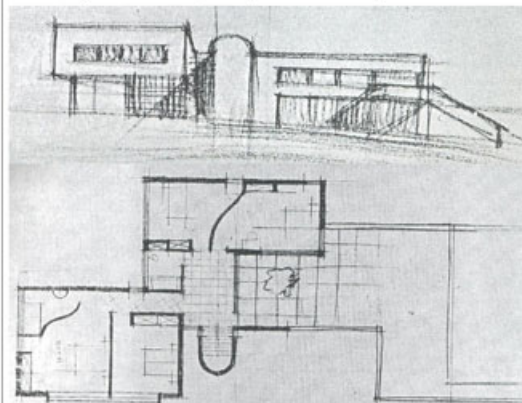


Above: House Borckenhagen*, 47 Glenhove Road, Melrose Estate, Johannesburg: the first drawing showing the entire house as unplastered brick (1935) and with a low-pitched roof.

Analogy - as referred to in text



Architecturally, Le Corbusier's ideas began to take shape on the Highveld in the early 1930s: White cubic villas, raised on pilotis with curvilinear space forms, horizontal windows, roof terraces. House McLea (above), Houghton, Johannesburg by Martienssen, Fassler and Cooke (1934) was such an example. In a comparison between Houses Stern and McLea, Jonas noted the 'application of the principle of separate expression to separate functions' which allows 'no overlapping in either the horizontal or the vertical plane' that makes House McLea in particular 'markedly successful' (Jonas, 1937:101-103).



Left, top to bottom: House Stern, Houghton, Johannesburg (1934) by Martienssen, Fassler and Cooke, showing all the traits of the Modern Movement. Images and plan from Jonas, S.A.A.R., February 1937:101-103. House Stern was one of several houses in Johannesburg to represent the key elements from the Corbusier canon. It explicitly showed the theoretical framework of Martienssen and the building's resolution of complex sculptural form marks it as a major local interpretation of the International Style (Cooke in Beck, 1985:59).



Below: The most ubiquitous icon of modernity: Villa Savoy (1928-31), Poissy, France by Le Corbusier. The villa was the culmination of a zealous codification of aesthetic canons, belonging to Le Corbusier's purist phase (1917-30). After its completion, Le Corbusier adopted a more regionally and climatically responsive architecture (Joubert in De Beer et al, 2000:118).



KEY WORDS: **Le Corbusier, Citrohan derivatives, Martiensen, projecting frame, Regionalism**

MOTIF SHEET **6**

Drawing of project by Norman Eaton
(Eaton Collection UP Repository)



House Tosi, Westend, Pretoria (1938): Unusual for Eaton, the design is a Citrohan derivative. On the northern side, the double volume living space is expressed in a double height window with protecting extruded frame. One of the walls is rendered in stone.



Land Bank Building, Kroonstad (1944): An extruded frame defines the vertical entrance articulation, employed previously for House Tosi (1938) and also previously disseminated in Johannesburg through Martiensen.

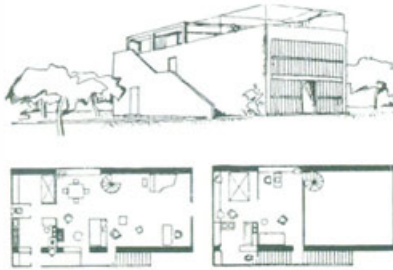


New Building for the South African Mutual Life Assurance, Pretoria (1946): The design is parallel to the development of a high-rise vernacular in Johannesburg at the time, based on adaptations from pre-war Corbusier ideas, Martiensen's projecting frames and set within the post-war Brazilian rhetoric.



Netherlands Bank*, Pretoria (1947): One of the initial façade studies, highlighting appropriate fenestration in relation to directional influences. Note the canopy over the sidewalk that was not approved by the client.

Analogy - as referred to in text



Maison Citrohan, Le Corbusier, 1920: 'a veritable box which could be used as a house' (Frampton, 1992:155). The name 'Citrohan' was a play on the famous automobile company, indicating that a house could be as standardized as a car.



The Martiensen house (1940), Greenside, Johannesburg for Rex and Heather Martiensen. Citrohan-window derivative, small cantilevered parapet canopy, square inset windows in blank vertical plane, **thematic framing of the street elevation:** white rectilinear projecting frame, raised plinth (Chipkin, 1993:181).



The Mathes House (1935), Charente-Maritime, La Palmyre-Les Mathes, France, published in the March 1938 issue of the SAAR (Image from <http://ltha.epfl.ch> [Accessed 12/12/2013]).



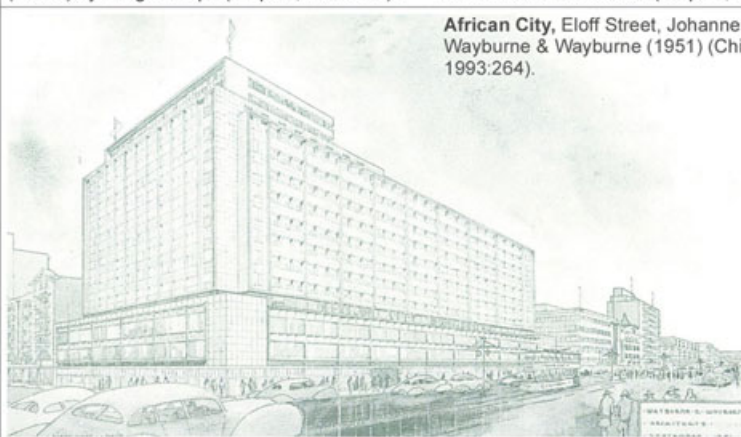
Bottom left: Le Corbusier, Villa de Mandrot (1930-31), Le Pradet, Toulon, France (Image from http://ltha.epfl.ch/enseignement_lth/theorie/exemples_th1/reg_irreg_2/M_02_Corbusier/Corbu_Villa_De_Mandrot_Le%20pradet_1.pdf [Accessed 12/12/2012]).



Davon House, Jeppestown, Johannesburg, (1950s) by Kling & Trope (Chipkin, 1993:234).



Cranbrooke Hotel (1947), Hillbrow, Johannesburg, by H.H. Le Roith: a Martiensen inheritance (Chipkin, 1993:227).

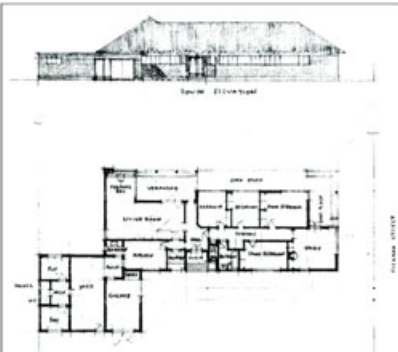


African City, Eloff Street, Johannesburg by Wayburne & Wayburne (1951) (Chipkin, 1993:264).

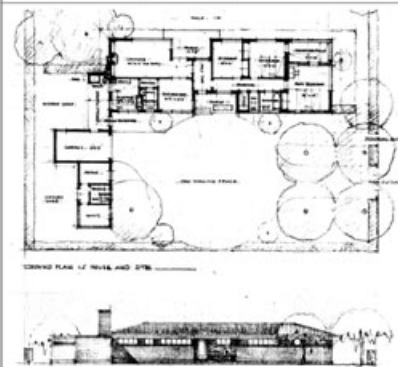
KEY WORDS: **Single-storey corridor pavilions, Stauch, Nunn, Wright**

MOTIF SHEET **7**

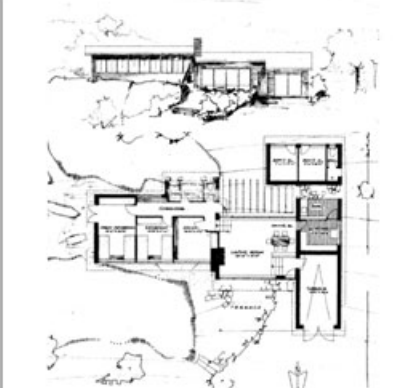
Drawing of project by Norman Eaton
(Eaton Collection UP Repository)



House Theron (1936): First, unbuilt design for House Theron, Pretoria. Horizontal demarcation of public and private.



House Malherbe, Waterkloof (1938) with Wrightian elements.



House Axelson, Pretoria (1952).

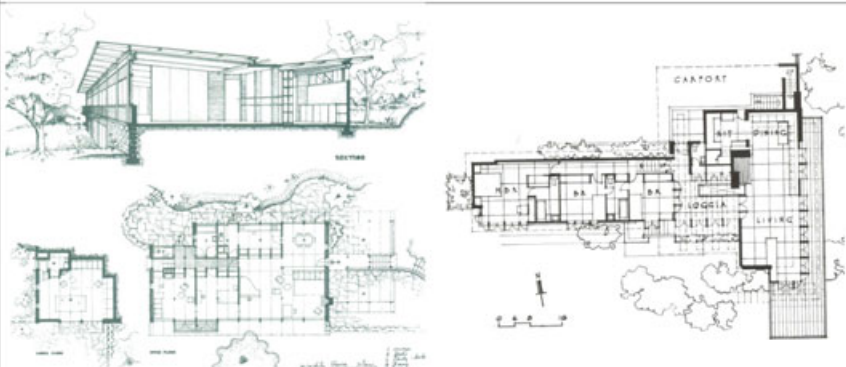


House Holsboer, Pretoria (1954).

Analogy - as referred to in text



Hellmut Stauch arrived in South Africa in 1935 and joined forces with **Aubrey Nunn** during the later 1930s to early 1940s. Typifying Stauch's work of the thirties were rectangular plans, oriented due north, structure and manipulation of space in Miesian manner, contact between inside and outside, smooth, white-washed plastered planar walls or facebrick panels with windows that reached to the soffit, low-hipped corrugated iron roofs that deeply oversail to 'recall the floating roof aesthetic of the Barcelona Pavilion or the Wrightian prairie house' (Peters in Fisher *et al*, 1998:177) Images above from Casson, H. 1940. 'Modern Architecture in South Africa'. *Architectural Review*, August:37-44.



Winckley House, Villiera, Pretoria (1941-5) by Stauch, with modular grid and lightweight, butterfly roof that was much published at the time (Peters in Fisher *et al*, 1998:180).

Above: Plan of the **Gregor Affleck House**, Bloomfield Hills, Michigan, USA (1941), by Wright is a typical Usonian house. Typical of the so-called 'Usonian' houses developed by Wright from 1936, is a usual long, narrow, low corridor, a modular grid as guide, use of brick, easy and inexpensive to build (Hildebrand, 1991:132).



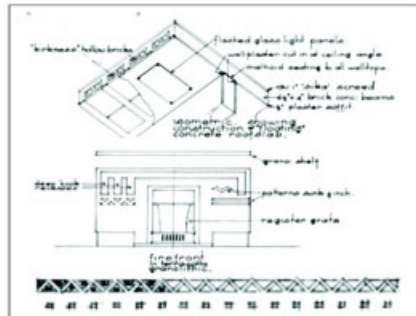
Above: The later work of Stauch resonated with Le Corbusier and Jeanneret's **Maison Errazuris**, Chile (1930) with its butterfly roof and lightweight construction offset by local rubble stone. (Image from <http://www.fondationlecorbusier.fr/> [Accessed 27/07/2013]).



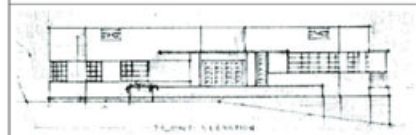
Top left and bottom left: **House Meyer**, Waterkloof Ridge, Pretoria (1957) by Stauch with a resemblance to the work of Neutra (Peters in Fisher *et al*, 1998:185).

KEY WORDS: **Moerdyk, Art Deco, Afrikaner-African idiom, rondawelhuise**

Drawing of project by Norman Eaton
(Eaton Collection UP Repository)



Top image: Detailing around the fireplace of House Boyes, Pretoria (1934), directly above: The chevron patterning along the horizontal binding wall of the Nicholson house (1934).



Above: House Smit, Pretoria (1936) – the design is very unusual for Eaton – a clustered typology centered around the main living space reminds one of Moerdyk’s work.
Below: Cottage Teichman, Pretoria (1940). Images from the Eaton Collection.

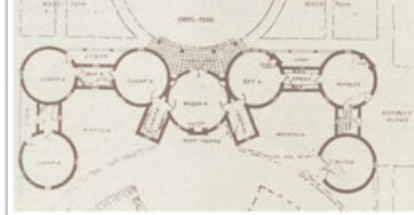
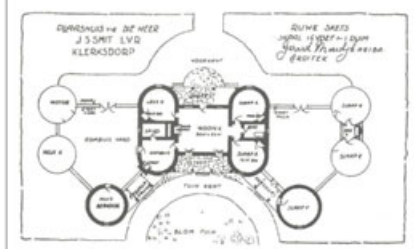


Analogy - as referred to in text



Above: The Merensky Library (1933-36), by Moerdyk. Various influences, including: **Art Deco, Neo-Classicism, Arts and Crafts**, as well as local styles such as **Cape Dutch and Regency**. Moerdyk had described the building as a study in Persian style, with influences from Africa including the **Zimbabwe** and **ancient Egyptian ruins**. He used local materials and incorporated symbols of African origin. The prominent **zigzag pattern**, for example, is taken from the Zimbabwe ruins and represents water and fertility, the crocodile as a water figure and the bird as a symbol of space, symbolizing the freedom and creativity of the author (Source: <http://repository.up.ac.za/handle/2263/6571> [Accessed 12/01/2013]).

Eaton was also amidst the genealogy of personalities who were advocating a so-called 'Afrikaner-African idiom' (Fisher, 1997:70; 1993:132). His work therefore resonates with that of Moerdyk whose application of the African motif has many precedents, a case in point being the horizontal relief strip-work of chevron patterning on the facades of the Merensky Library (1933-36).

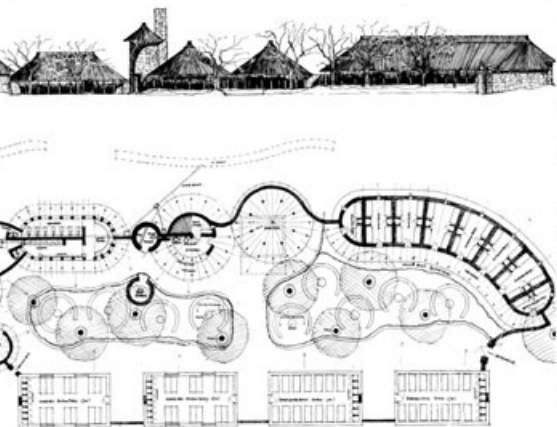


Images left and below: Moerdyk discussed the arrangement of *rondawelhuise* in *Die Boerevrou* (December 1921, 1989:18-9) where he suggested an arrangement for rondawels to evoke an African settlement.

Rondawelhuise

The rondawelhuise is a traditional form of housing... (text continues with a description of the structure and its cultural significance).

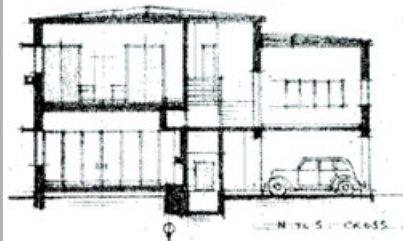
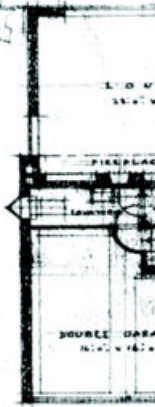
Pierneef and Moerdyk were among those who had propagated a domestic architectural language appropriate for the Transvaal through the use of local materials such as thatch, local craftsmanship, response to climate and resultant honesty of language. The propagation of such architectural response was especially disseminated through *Die Boerevrou* (Fisher & Le Roux, 1989:12-13).



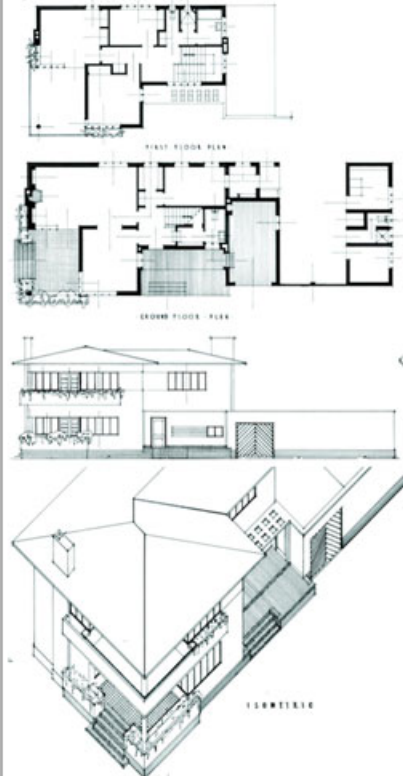
Far left: Cottage on Berea Street by Eaton (c.1949) and to the left, the African Compound, Pretoria Golf Club, Pretoria (1948-9). Other buildings by Eaton where analogies can be drawn with the work of Moerdyk, also in relation to the idea of the **Afrikaanse woonhuis** (Fisher & Le Roux, 1989), include: the Laurels Cottage (1930), Farmstead Hill (1932), Cottage Collender (1933), House Turvey additions (1934), House Kling (1936), Homestead Cooper (1937), House Warren (1941), Farmstead Buys (1943) and generally all the war-period thatch houses.

Drawing of project by Norman Eaton
(Eaton Collection UP Repository)

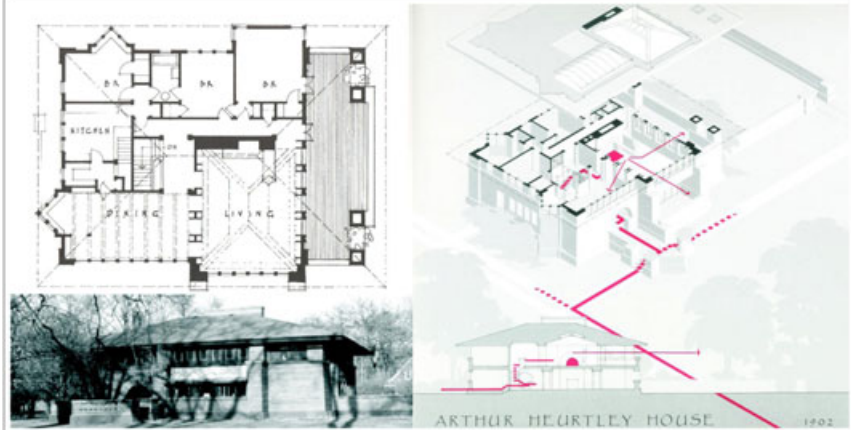
House Borckenhagen, Johannesburg (1935) right: The end of the longitudinal axis is punctuated with a triangular projection. Below: Section showing the study is on a mezzanine level above the garage, reached by one riser, with another riser leading to the bedrooms above. This allows the house to step in section so that the living room has a higher ceiling than subsidiary spaces.



Below: House Rawlins, Brooklyn, Pretoria (1937) with deep roof overhangs, horizontal strip windows, corners 'opened' with windows, loggia, terrace and yard, low-binding planted walls. Other aspects include: served spaces make up a 'head' while the servant spaces constitute the 'tail', the axis of the house originates in the hearth, expands into the living area, chimneys hold the 'head' intact whilst balancing the composition between vertical and horizontal, and square cut-outs in the slab over the entrance porch are once again decidedly Wrightian.



Analogy - as referred to in text

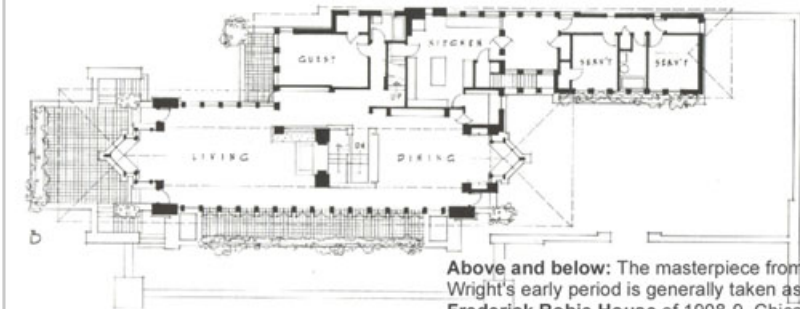
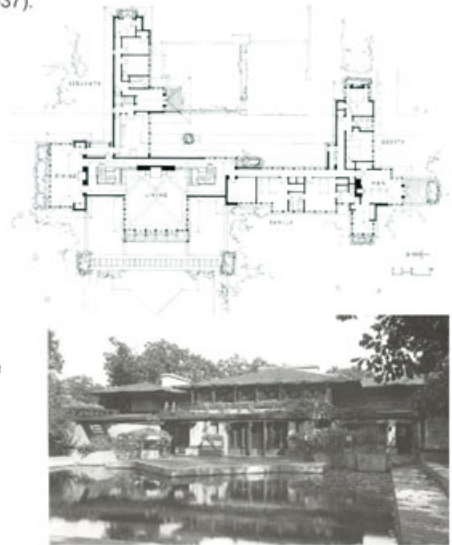


Frank Lloyd Wright's first fully mature Prairie House is considered to be the **Arthur Heurtley House (1902)**, Oak Park, Chicago, Illinois, USA. Pictured above are the upper ground floor plan with living and dining spaces to the front and a terrace to the far right. Major spaces were therefore placed directly under the roof, so that the major spaces are differentiated with a higher spatial volume (Hildebrand, 1991:23-37).

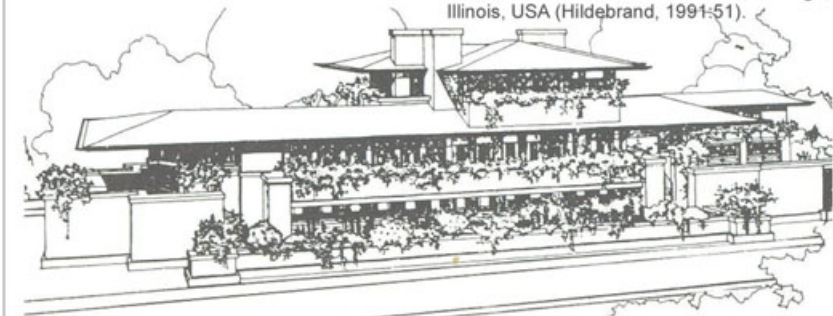
Wright's **Avery Coonley House (1907)**, Riverside, Chicago, Illinois, USA, pictured to the right (Hildebrand, 1991:46-50).

Typical Prairie House features:

- house as refuge
- vertical articulation of chimney mass
- bands of windows
- deep overhanging low-hipped roof
- sense of arrival and movement
- terraces, balconies
- loggias
- screening planter boxes
- pronounced horizontality
- connectedness between inside-outside
- irregular distortions to the rear accommodate service elements
- low binding walls, integrated with site
- double-height volumes for important spaces, variation in ceiling heights
- either **asymmetrical and picturesque** (Coonley House) or **compact, gridded, symmetrical and architectonic** (Robie House)(Hildebrand, 1991).

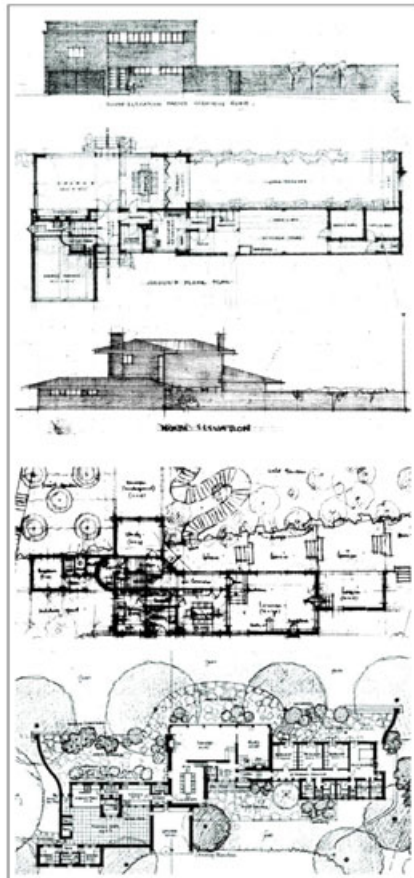


Above and below: The masterpiece from Wright's early period is generally taken as the **Frederick Robie House of 1908-9**, Chicago, Illinois, USA (Hildebrand, 1991:51).



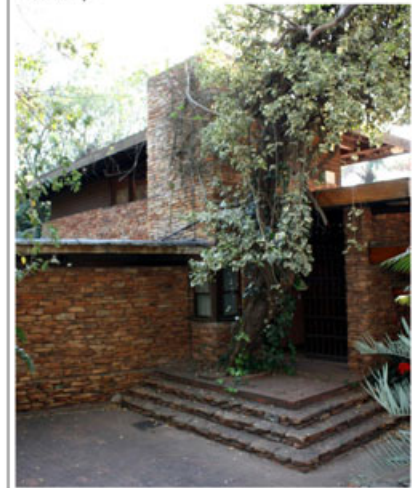
KEY WORDS: **Norman Eaton and Frank Lloyd Wright**

Drawing of project by Norman Eaton
(Eaton Collection UP Repository)

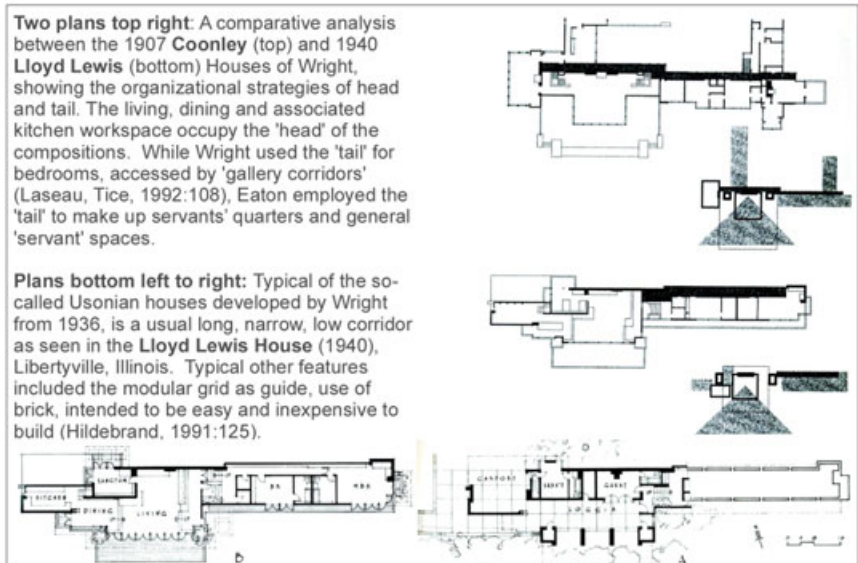


From top to bottom: House Borckenhagen (1935) elevation and plan, House Lorne elevation (1938), House de Loor (1938) plan, House Anderssen (1949) plan. The head and tail motif is repeatedly employed by Eaton in his early work – only a selection is shown above. The living, dining and associated kitchen work space occupy the 'head' of the compositions. While Wright used the 'tail' for bedrooms, accessed by 'gallery corridors' (Laseau, Tice, 1992:108), Eaton employs the 'tail' to make up servants' quarters and general servant spaces.

Below: A recent photograph of the entrance to the Greenwood House (1948–51), the Willows, Pretoria, by Eaton (Photo: Morné Pienaar).

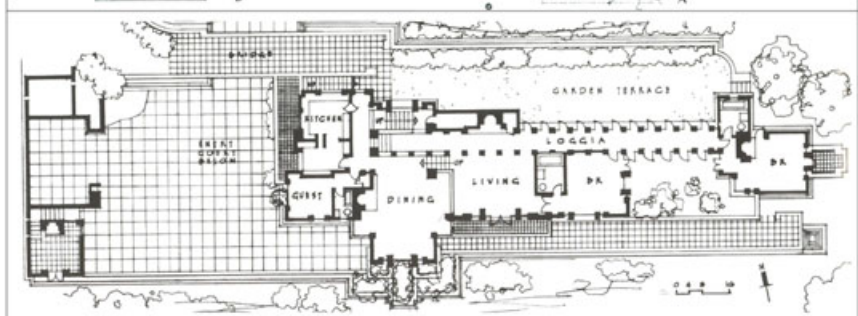


Analogy - as referred to in text



Two plans top right: A comparative analysis between the 1907 Coonley (top) and 1940 Lloyd Lewis (bottom) Houses of Wright, showing the organizational strategies of head and tail. The living, dining and associated kitchen workspace occupy the 'head' of the compositions. While Wright used the 'tail' for bedrooms, accessed by 'gallery corridors' (Laseau, Tice, 1992:108), Eaton employed the 'tail' to make up servants' quarters and general 'servant' spaces.

Plans bottom left to right: Typical of the so-called Usonian houses developed by Wright from 1936, is a usual long, narrow, low corridor as seen in the Lloyd Lewis House (1940), Libertyville, Illinois. Typical other features included the modular grid as guide, use of brick, intended to be easy and inexpensive to build (Hildebrand, 1991:125).



Above: A typical 'California House' by Wright: a concrete block series – the Charles Ennis House, Los Angeles, USA (1923–24). The outside perimeter is defined within a regular field or orthogonal grid (Hildebrand, 1991:84).

Below left: The entrance to the Hagan House, Kentucky Knob, Chalk Hill, PA, USA (1954–56) bears compelling resemblance to Eaton's Greenwood House. However, the house was part of Wright's hexagonal themes – where a diagonal would underlay all aspects of the design. Below: Arthur Heurtley House (1902) (Laseau, Tice, 1992:109, <http://www.flickrriver.com/photos/38039613@N08/5753111432/http://www.flickrriver.com/photos/38039613@N08/5753111432/> [Accessed: 16/01/2013]).

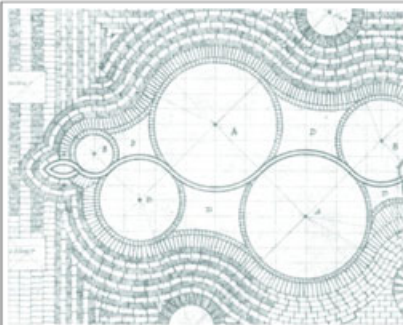


Below left: A recent photograph of the entrance to the Greenwood House (1948–51), the Willows, Pretoria, by Eaton and below right: the swimming pool extended from the semicircular cave in the adjacent wall (Photos: Morné Pienaar).



KEY WORDS: **Brazil Builds, Aalto, Stauch, texture, sinuous lines**

Drawing of project by Norman Eaton
(Eaton Collection UP Repository)



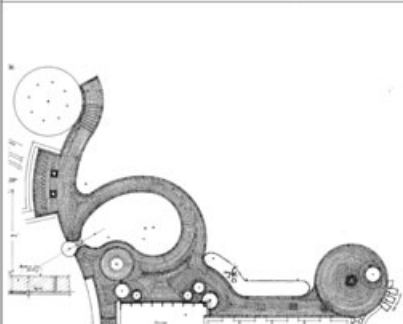
The brick textures, sinuous lines and central curvilinear wall from which all patterns resonate – Eaton's roof terrace of the **Netherlands Bank, Pretoria**, dated August 1954 (now destroyed).



The swimming pool at the **Greenwood House (1948–1951)**, The Willows, Pretoria (Harrop-Allin, 1972:54).



House Greenwood, The Willows, Pretoria – the revised concept proposal (May 1949).



Above: Construction drawings of **House Greenwood (March 1951)**, showing the detail of the brick paving and kidney-shaped pool.

Analogy - as referred to in text



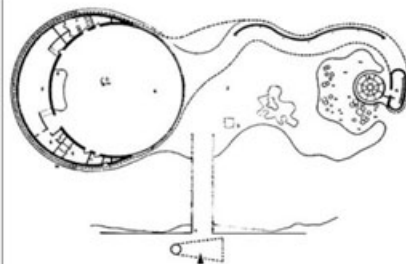
Roberto Burle Marx's sidewalks at Copacabana, one of Rio de Janeiro's beaches as drawn by **Norman Eaton** on his travels in 1945 to the Americas (Eaton's 1945-diary in the UP Repository).



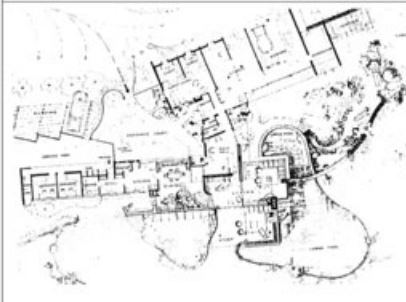
While there is no evidence in Eaton's diaries that he had ever actually met Marx in person, he was clearly exposed to his work as demonstrated in the diary extract (top left) – the diary entry of the **Copacabana Esplanade** is the first entry in his 1945-diary. (Photos by Malcolm Raggett, from <http://www.mraggett.co.uk> [Accessed 13/01/2013]).



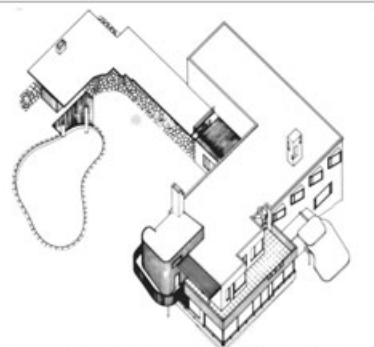
Burle Marx had organized indigenous plants and surfaces in accordance with the aesthetic principles of the artistic vanguard of **Cubism and Abstractionism**. From left to right: Marx's project for the terrace garden of the **Ministry of Education and Health, Rio de Janeiro (1938–43)** by **Oscar Niemeyer, Lúcia Costa, Affonso Reidy** and team, consulted by **Le Corbusier** (From the Collection Burle Marx & Cia Ltda). Middle: The actual terrace garden, as must have been seen by Eaton and his fellow travellers. Far right: The gardens of **Casa do Baile (1943)**, Pampulha were also done by Marx (Photos by Malcolm Raggett, from <http://www.mraggett.co.uk> [Accessed 13/01/2013]).



Eaton had been impressed with the work of Niemeyer, who had showed him the scheme for **Belo Horizonte** and had personally given him a copy of a new publication of the scheme (Eaton's 28/8/45 diary entry). The curvilinear site bounding elements of **Casa do Baile (1943)**, **Pampulha, Belo Horizonte** possibly inspired Eaton – he could have recognized the affinity between Niemeyer's free-flowing, sensuous curves and African organic plasticity (Chipkin, 1993:289).



Hellmut Stauch's own house: **Hakahana, Hartebeestpoort Dam, 1952**. Stauch also contrasted linear form with sinuous line in his domestic work following his trip to Brazil, as demonstrated in the curvilinear swimming pool (Peters in Fisher *et al*, 1998:182–184,195).

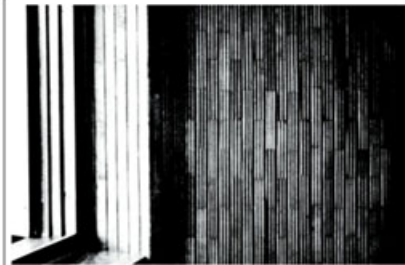


Finnish architect **Alvar Aalto's Villa Mairea (1938–39)**, Noormarku, Finland with the symbolic kidney-shaped pool and sinuous formal extensions (Frampton, 1980; 1992:199).

KEY WORDS: **Brazil Builds, Stauch, texture, sinuous lines, porous architecture**

MOTIF SHEET **12**

Drawing of project by Norman Eaton
(Eaton Collection UP Repository)



Above image of the interior wall surfaces of the Land Bank (1941), Potchefstroom. Eaton's construction drawings show the word 'faggots' to describe the vertically corrugated, glazed tile surfaces. Faggot means 'bundle of sticks' (Image from Harrop-Allin, 1975:44).

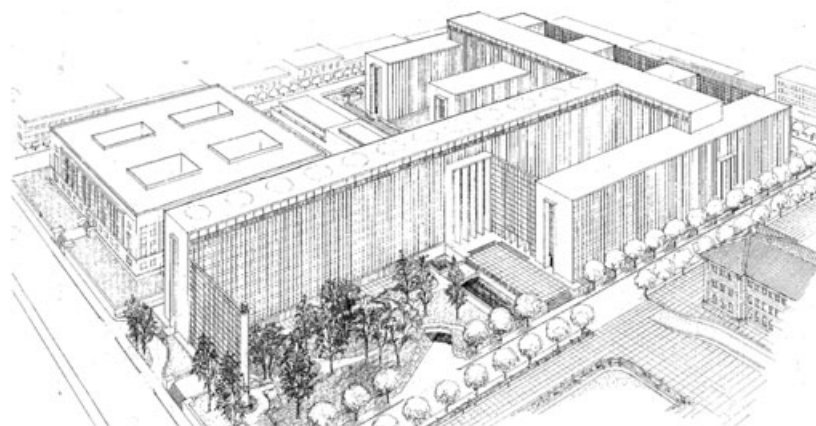


Above: Fountain spout detail for the Netherlands Bank, Pretoria (1955). Eaton rarely translated themes directly.

Below: One of Eaton's own collection – a photograph of the Wachthuis (1956): Office block for the South African Police Provident Fund, with sinuous brick baskets on the roofscape to contain services.



Below left to right: Ministry of Transport Building (1944–48). The design was the first South African one in the modern idiom for a civic client and the first to be directly influenced by the new Brazilian architecture (De Beer, 2000:110).



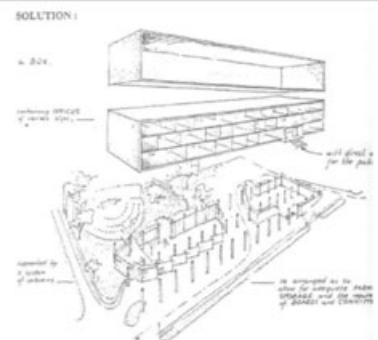
Analogy - as referred to in text



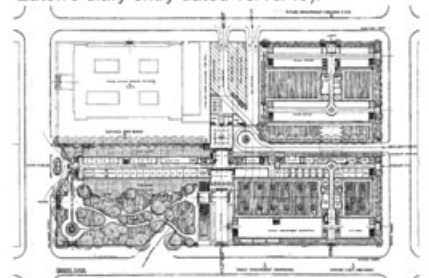
Above: Stauch's synthesis of 'Brazilian design' for the Meat Board Building (1950), Pretoria – long, modular office block raised off the lower ground slope with cylindrical pilotis, brise soleil, curvilinear roof garden, deep blue mosaic cladding of spandrels (Gerneke in Fisher *et al*, 1998:224).



Above: Reflections of local sea-life: Mural of tiles of west façade of the Ministry of Education and Health, Rio de Janeiro, by artist Cândido Portinari (1903-1962) (From: Archive of Hispanic Culture, Prints and Photographs Division). Left: The Ministry of Education and Health or Gustavo Capanema Palace (1939–43), designed by a team composed of Lucio Costa, along with Affonso Eduardo Reidy, Ernani Vasconcellos, Carlos Leao and Jorge Machado Moreira. Oscar Niemeyer, who was to become Brazil's best-known architect, also played an important role in the design process. The group invited Le Corbusier to oversee the project, which was designed from 1935 to 1936 (Blasi, Tostões, 2010: 56–65). The building was included in the influential publication 'Brazil Builds 1652–1942' (1943), staged at the Museum of Modern Art (MoMA). Recognizable aspects of the design include: pilotis, facades with brise soleil, roofscape garden (by Marx), juxtaposition of blocks, flexible office space.



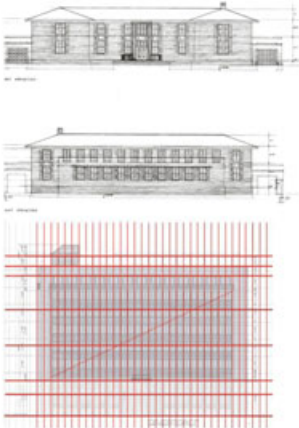
Eaton had the opportunity to show the design of the scheme to Mies van der Rohe on 15 October 1945. Along with the others present, Mies thought the design to be a 'very clear' [clean?] solution to the problem and 'as usual' was very interested in the screens' (From Eaton's diary entry dated 15/10/45).



KEY WORDS: **Italian Renaissance, classical order, controlling lines**

MOTIF SHEET **13**

Project by Norman Eaton (Drawings from the Eaton Collection, UP Repository)



Above top: The Land Bank in Potchefstroom (1941), with symmetrical facades and above below: the southern elevation of the Netherlands Bank, Pretoria, with 1.2m grid-lines (1949).



Top and below: Netherlands Bank, Pretoria, 1946-55.
Above: Netherlands Bank, Durban, 1960-65 (Harrop-Allin, 1975:96).



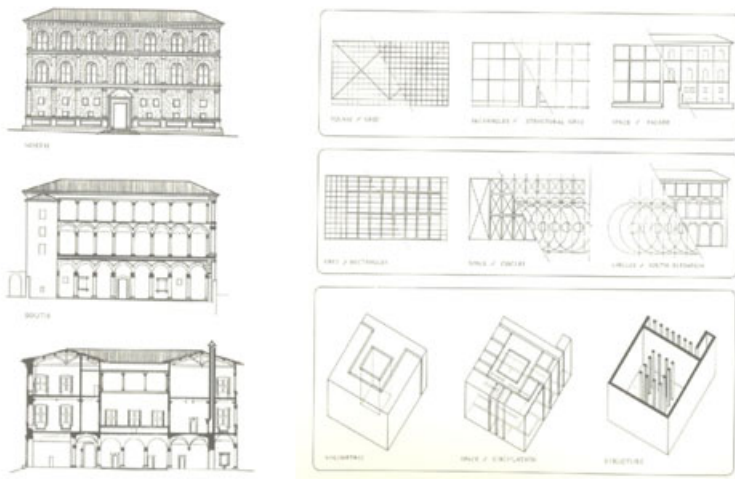
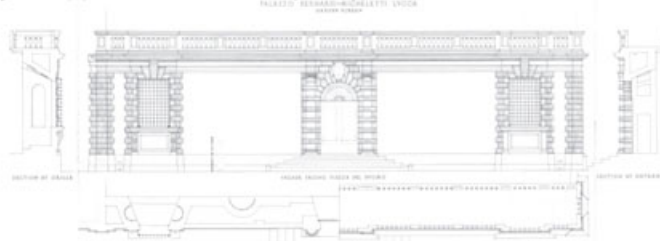
House Anderssen (1949-50), above and below House van den Berg (1964), set out according to an orthogonal grid derived from standard window modules - typical of Eaton's later work.



Analogy - as referred to in text



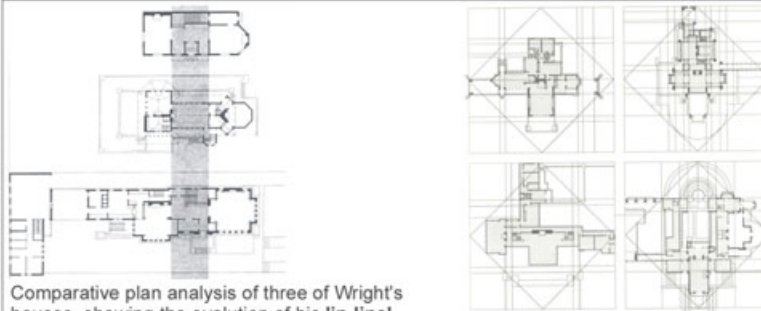
Above: From the Eaton Collection - study drawings Eaton did as a student (dating from c. 1927) of Italian Renaissance palace facades, with their typical tripartite division and underlying classical proportions and positions of principal elements. Below is a meticulous study drawing that he had done of the garden screen at the Italian Renaissance Palazzo Bernardi, Micheletti, Lucca, Italy (early 1500s) (Eaton Collection, UP Repository).



Harmonic and compositional analysis of the Picolomini Palace in Pienza, designed by Bernardo Rossellino and begun in 1462 (Crowe, 1997:104-5).



Left: Baldassare Peruzzi's Palazzo Massimi alle Colonne, Rome, 1527 (Images from <http://blog.classicist.org/?p=512> and <http://www.lib-art.com/artgallery/53758-palazzo-massimo-alle-colonne-peruzzi-baldassare.html> [Accessed 16/01/2013]).



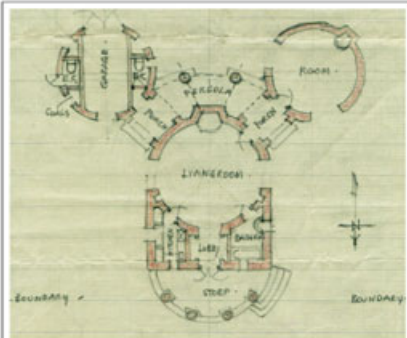
Comparative plan analysis of three of Wright's houses, showing the evolution of his 'in-line' hearth type (Laseau, Tice, 1992:77), where the plan is established by a baseline or horizontal axis that determines the disposition of a primary longitudinal volume and serves as a foil for secondary cross axes.

Plans of four of Wright's houses, with controlling lines: Controlling lines discipline the overall form of a building and all the constituent elements with one another (Crowe, 1997:171).

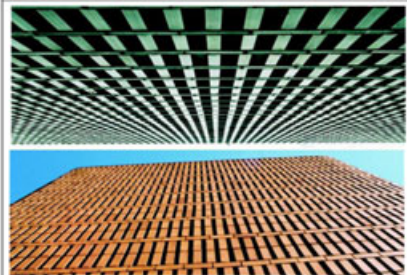
KEY WORDS: **Italian Renaissance, classical order, controlling lines**

MOTIF SHEET **14**

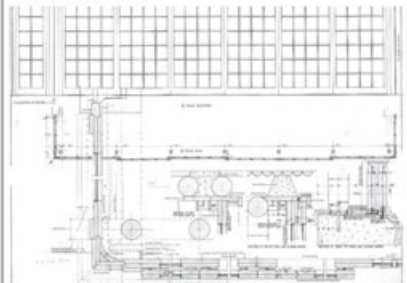
Project by Norman Eaton (drawings from the Eaton Collection, UP Repository)



Above: Berea Cottage (c.1949), Pretoria, below: House Moolman (1961) detail.

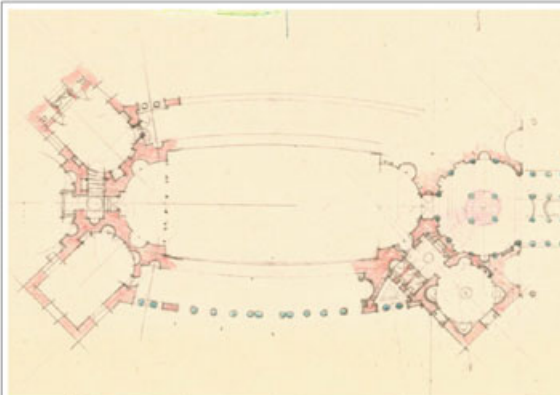


Top: Glazed screen of the Netherlands Bank (1960–65), Durban, Bottom: brick screen on the roof of the Netherlands Bank building, Pretoria (1946–55). Photos by Morné Pienaar.

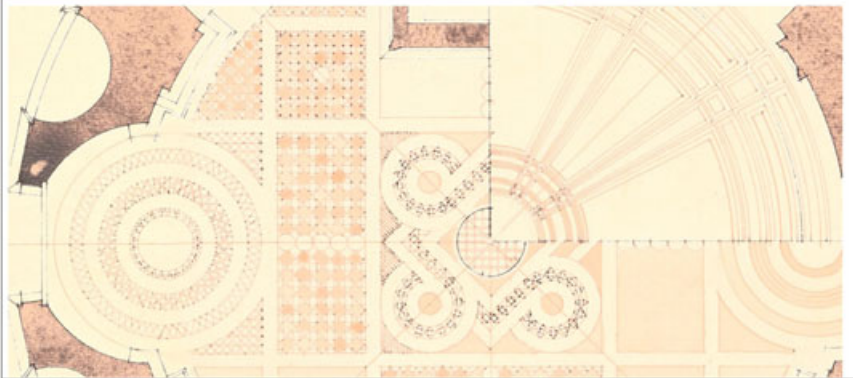


Top: Window modular of House Anderssen (1949), regulating all elements. Bottom: The house design for the Australian High Commissioner (1959) showing the orthogonal grid derived from windows and the regulating or controlling 'in-line' central alignment.

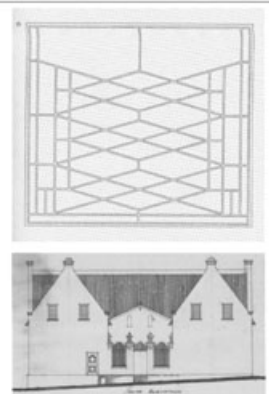
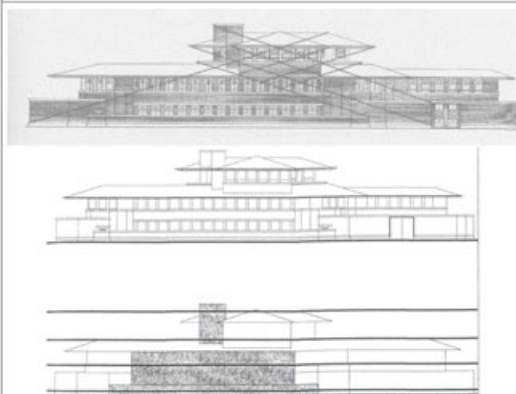
Analogy - as referred to in text



Above left: Student project by Eaton (c. 1927) from the Eaton Collection, UP Repository. Below: Student project by Eaton – watercolour study of floor mosaic work of Donato Bramante's Tempietto, S. Pietro in Montorio, Rome (1502). Complete water colour drawing in UP Repository.



Top left: The red brick Wainwright Building, Chicago (1890-91) that Eaton would certainly have encountered in 1945. Middle and right: the Guaranty Building by Adler and Sullivan, Buffalo (1895). The basic austerity of Louis Sullivan's stereometric structures was in opposition to the tectonic ornamentation by which they were enriched and articulated. Similar to Eaton's disciplined ornamentation, Sullivan's ornament is always contained by geometric form and precision. His famous slogan 'form follows function' found its ultimate expression in the concave cornice of the Guaranty Building (1895) where the ornamental surface swirls around the mechanical system of the building (Frampton, 1992:54–56).



The pattern in windows of Wright's Robie House (1908–9), plays with and reveals the regulating lines that govern the whole composition (Buchanan, 2012:93), demonstrated in the top two images. Below to the left an analysis of the Robie House elevation reveals dual symmetries and the classical base, shaft and capital organization (Laseau, Tice, 1992:102–3). Bottom right: Extract from Eaton's drawings of the symmetrical facade of the Cape Dutch Stellenberg House, 1928 (Eaton Collection, UP Repository).

KEY WORDS: Pretoria Vernacular - Johannesburg Vernacular

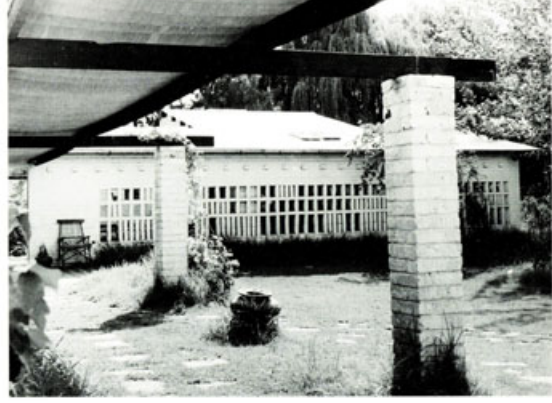
MOTIF SHEET **15**

Project by Norman Eaton



From top to bottom: Ydragsil, studio for artist Alexis Preller (c.1944), brick recesses for books in House Van Den Berg (1964), House for artist Esias Bosch (1961), House Anderssen (1949) (Photos from Eaton Collection, UP Repository, interior view of Bosch House by Morné Pienaar).

Analogy - as referred to in text



Eaton was an important reference point for a group of Johannesburg architects in the post-war era. The group included André Hendrikz, Donald Turgell, Mannie Feldman, Wibo Zwart and Jack Clinton (Chipkin, 1993:287). **Top:** Marrakesh (1960), Lyndhurst, by Donald Turgell, **Right:** Egon Guenther Gallery (1965) also by Turgell, **Below:** House Hendrikz, Melrose North (1957) (*ibid.*:294-299).



Eaton's influence was widespread, influencing Revel Fox and Gabriel Fagan – the latter who had been taught by Eaton for a year while studying architecture at the University of Pretoria (Chipkin, 2008:378).

In Johannesburg, the practice of Mira Fassler-Kamstra (John Fassler's daughter) and Marcus Holmes acknowledged his contribution as follows:

'The vernacular is deliberately taken here as a source for understanding conventional tested solutions to environmental and constructional issues - in much the same way that Norman Eaton studied traditional methods' (Beck, 1985:26). The latter statement referred to House De La Harpe (1975), Sandton, Johannesburg, picture right and below.



North elevation



West elevation

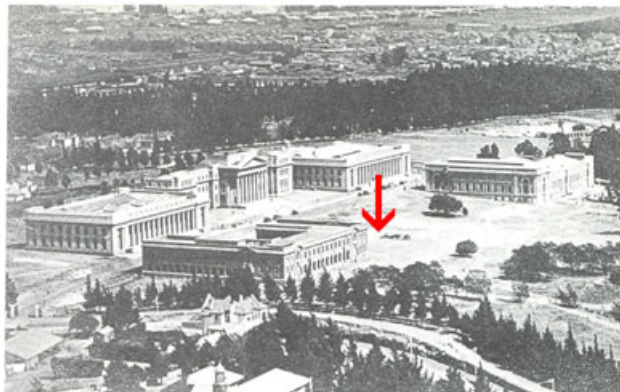


Section A-A

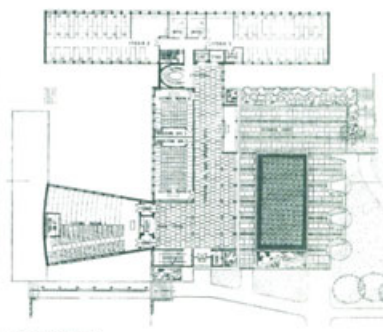


KEY WORDS: **Eaton's institutional work versus others' institutional work**

MOTIF SHEET **16**



Left: Set within the context of the mostly Beau-Arts neo-classicist Campus, with most buildings by the architectural practice of Emley & Williamson of the 1920s, the site for Eaton's commission for a new Administration Building, Wits, seems to have been where the Wartenweiler Library is built today. Immediately to the west of the Biology Building, it was a prominent location with its longest side facing west onto the open forecourt of the Library Lawns, set one level below the front of the classical entrance façade of the Central Hall (Image from Chipkin, 1993:78). The red arrow points at the site.



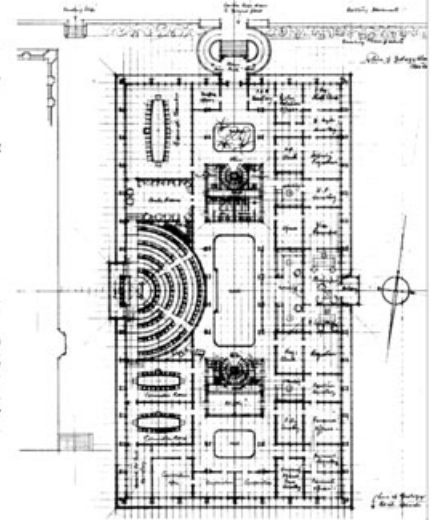
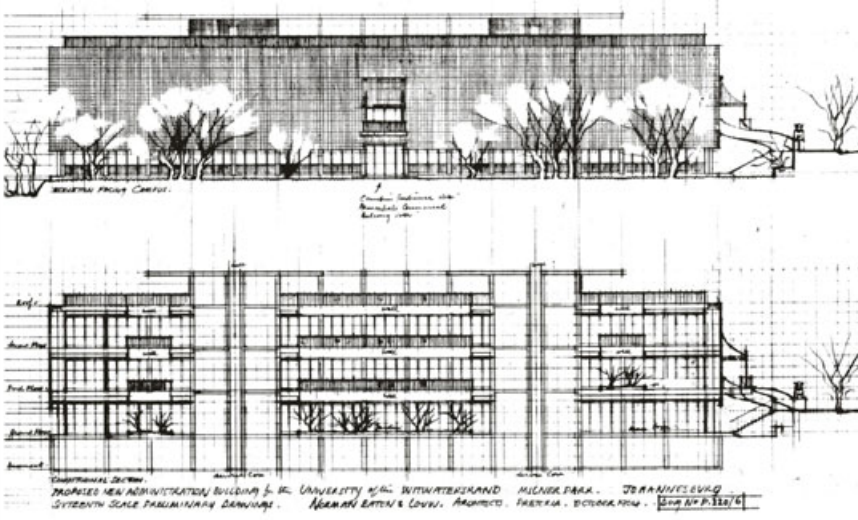
Above: Dental Hospital (1949–52), Wits University: design perspective by John Fassler (Image from Chipkin, 1993:271). 'The first signs of shifts parallel to European ones appeared in John Fassler's second Dental School in the form of Perretesque classicism with a syntax of bay subdivision, intricate framing of precast elements, grilles, slender fluted columns and vigorous cornice closely related to the Fribourg Catholic University' (Cooke in Fisher *et al.*, 1998:238).



Top Left: Fassler, Howie, Herbert, Shunn, Tomaselli & Morgenstern in association, John **Moffat Building**, Wits (1954–59) Watercolour far left by John Fassler (c.1958) (<http://www.wits.ac.za> [Accessed 12/12/2012]).

Left: Hanson & Tomkin, **Faculty of Geology & Mining Engineering**, Wits (1960–62): A fusion of classical ideas and contemporary technique, with impurities in the handling of space – neither in Corbusian continuity or neoclassical succession (Cooke in Fisher *et al.*, 1998:239). Decoration was also reintroduced to buildings in the post-war years – decoration could be applied, materials themselves could be used for their decorative value. Relief-panels by artist Edoardo Villa were used above the entrance to the building. (*ibid.*:249).

Below: The proposal for a new Administration Building (1964) at Wits, by **Norman Eaton**. Fassler was also in attendance at the presentation to the client, which was 'well-received' according to Eaton's diary entry ('29.10.1964'). His design yet again abstracted the classical devices of the Italian Renaissance into a thoroughly modern idiom that responded to climate. Hailing the then ongoing Netherlands Bank in Durban with its sublimation of the Brazilian impact, the proposal was for the building to be wrapped in its totality with a climatic screen – most probably the result of the major facades facing east and west. Internally, functions are arranged around three open courtyards in a neoclassical diagram, with vertical circulation placed in between (Drawings: Eaton Collection, UP Repository).



KEY WORDS: **Eaton's last four houses, Africa, inter-connected courtyards, formal relationships, Neutra, Van der Rohe, Johnson, brick carpets**

MOTIF SHEET **17**

Above: Plan of House and Studio Bosch (1961).

Above left: A loose page dated '23/1/1950' in Eaton's documents, showing a typical Chembe dwelling at Lake MacClean, Lake Nyassa. **Above right:** Ndebele settlement layout with inter-connected pavilion courtyard spaces (Frescura, 1983:39).

Above: Plan of House Laurence Scully (1962).

Above left: On the same scale Top: Mies Van der Rohe's Farnsworth House (1946), Plano, Illinois, USA and Bottom: Philip Johnson's (1906-2005) Glass House (1949), New Canaan, Connecticut, USA (Frampton, 1992:241). **Above Right:** Positive and negative space comparison of Houses Scully and Moolman on the same scale (by the author).

Above: Plan of Moolman/Courtyard House (1961).

Above left: The brick carpet of the Moolman House, **Above right:** Eaton's drawing of carvings on a pot at Lake Njara, Kabarole, Uganda (dated 9/7/41), where he differentiated between 'scratched' surfaces versus 'deeply incised' surfaces. A note reads 'All surfaces have in some portion on pot deep incised chevron common to all' (UP Repository).

Above: Plan of House van den Berg (1964) with directly below it a diagrammatic illustration of positive-negative spatial relationship. Diagrams by the author.

Above Left: Photographs from the Eaton Collection of the Van den Berg House, **Above right:** Upon Eaton's visit to the Americas in 1945, he had visited Richard Neutra's offices where he must have obtained these original Julius Schulman (1910-2009) photographs of the V.D.L. House (1933), Silverlake, California (Eaton Collection, UP Repository).

KEY WORDS: African lineage: Chronological sequence of African travels and related projects

AFRICAN LINEAGE 1

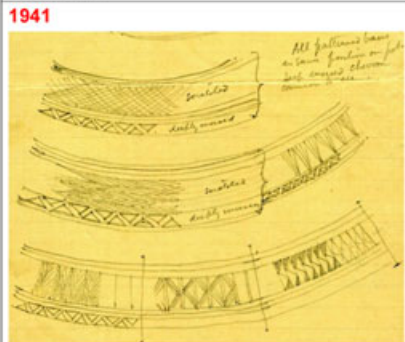
African References: Chronological selection of African travel sketches and photographs by Norman Eaton



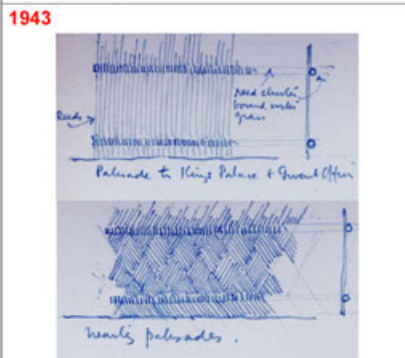
1932
Eaton had travelled to Egypt, en route to South Africa upon completion of his Baker-scholarship in 1932. He did not see Upper and Lower Egypt as divorced from Africa as so many others. According to his artist friend, Alexis Preller, he had particularly appreciated the bas-relief wall and the tiling of the sarcophagus chamber in the **Tomb of Ti at Sakarra** (Preller, 1966:10).



1939
Above: The house for artist Pieterneef, called 'Die Kraal', Elangeni, Brummeria (1939–1960s) where Eaton lodged for a time and had assisted with the design (Fisher et al, 1998:141).



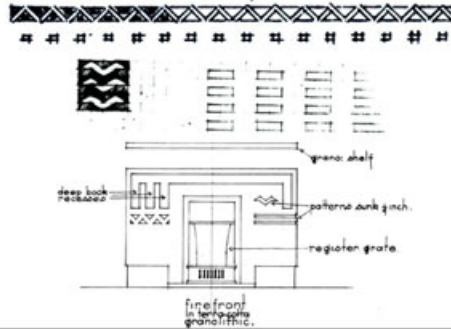
1941
Above: Enlarged portion of the sketch of carvings on a pot at Lake Njara, Kabarole, Uganda (dated 9/7/41)(Eaton Collection, UP Repository).



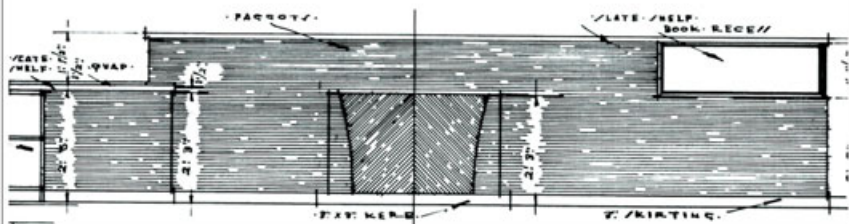
1943
Drawing of reed palisades showing 'basket effect' in Uganda, December 1943 (Eaton Collection, UP Repository).

Chronology of projects by Eaton with African references of texture, pattern, form or space.
The list is not exhaustive, but rather attempts to make an African lineage visible.

1934
Top: House Nicolson (1934) horizontal chevron strip. Middle: Detail recesses in the entrance lobby of House Gascoyne (1934), and Bottom: Deep book recesses and patterns around the fireplace of House Boyes (1934).



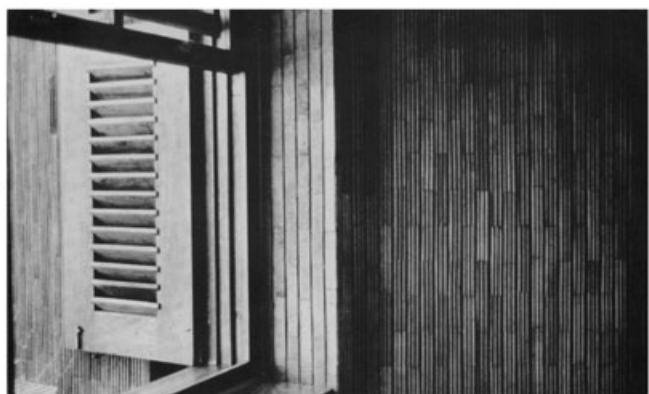
1936
Below: Fireplace detail, House Kling (1936). The word 'faggot' means 'bundle of sticks', as derived from Latin. In his later work, Eaton used the corrugated tiles as a metaphor to recreate a reeded surface pattern, reminiscent of ubiquitous African tribal grass and reed work, but also of certain Egyptian tombs. He probably used faggoting for the rendering of fireplaces in other houses, a drawing of the fireplace at House Van Wouw (1938) also shows the use of faggots (Eaton Collection, UP Repository).



1940
Right: House van Der Merwe (1940–41): the regularity of the brick courses is broken between the windows by panels of vertical patterning – a conscious attempt by Eaton to 'bear in mind the simple effects in indigenous Bantu bead and basket work' (Eaton, May 1946:110; Photograph from Harrop-Allin, 1975:35).



1941
Right: image of the interior wall surfaces of the Land Bank (1940–41), Potchefstroom. Eaton's construction drawings show the word 'faggots' to describe the vertically corrugated glazed tile surfaces, which means 'bundle of sticks' (Image from Harrop-Allin, 1975:44). Drawings date from October 1941.



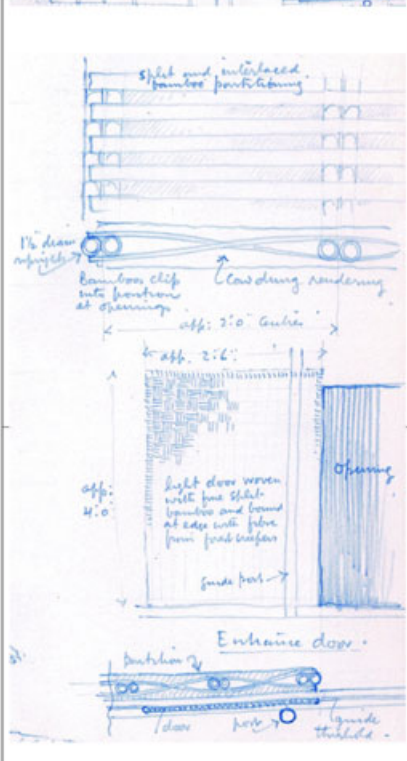
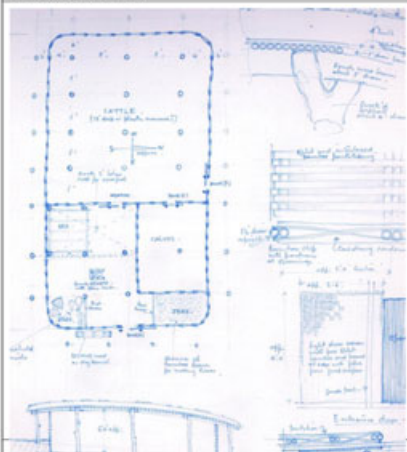
KEY WORDS: African lineage: Chronological sequence of African travels and related projects

AFRICAN LINEAGE **2**

African References: Chronological selection of African travel sketches and photographs by Norman Eaton



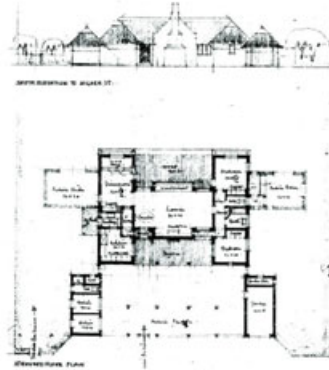
1943-44
Above: The layout and detailing of the King's Tomb (M'Tisu) on a hill west of Kampala off Bongo Road showing 'clusters of reeds' detailing (1943).



Above drawings: Masai Manyatta on Mount Elgon, showing weaving technique of entrance door and overall layout, including bamboo details (1944).

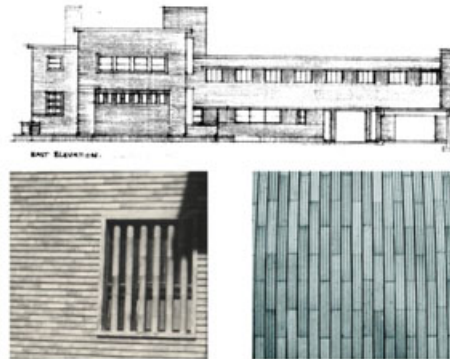
Chronology of projects by Eaton with African references of texture, pattern, form or space. The list is not exhaustive, but rather attempts to make an African lineage visible.

1940-41



Above: Cottage Teichman, Milner Street, Waterkloof, Pretoria (1940).

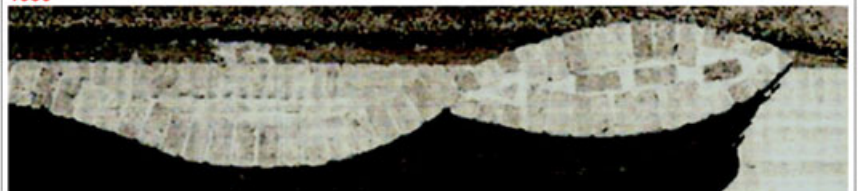
1944



Above: The Land Bank Building, Kroonstad (1944), where Eaton used a terra-cotta 'bamboo' screen in front of some windows (image left) and faggot tiles on the interior (right).

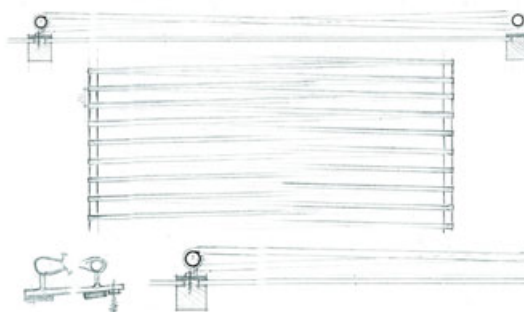
These two projects fall outside of the chronology, but relate to the adjacent 1944-sketchbook:

1950



Above: Photograph of the top of the entrance wall at the Little Theatre, (demolished) that was built c. 1950. The bamboo-reed screen of the 1944 drawing is translated into brick, where a central brick pier gave structural stability to the undulating wall. The pedestrian walkway and undulating wall of the Little Theatre forge a connected surface of patterned masonry, complementing the intricate and ever-changing shade patterns cast by the one on the other (Harrop-Allin, 1975:99).

1959

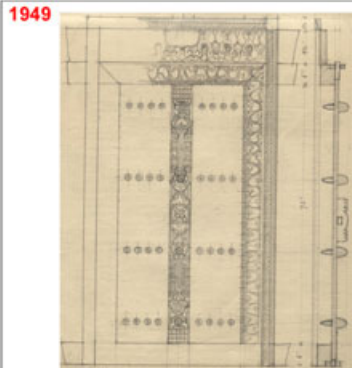


Three images above: Eaton's drawing of a handrail – it was in the same folder in the UP Repository as the drawings for the Koedoe Building refurbishment, 1959. Eaton's design for the rail is of the same weaving method as documented in the 1944-diary (UP Repository).

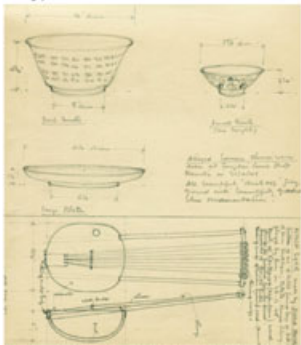
KEY WORDS: African lineage: Chronological sequence of African travels and related projects

AFRICAN LINEAGE **3**

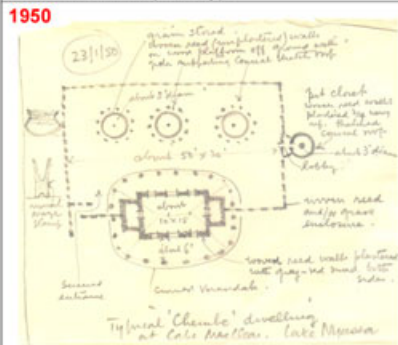
African References: Chronological selection of African travel sketches and photographs by Norman Eaton



1949
Above: Arab door seen in Zanzibar Shop, Nairobi (December 1949) (Eaton Collection, UP Repository).



Top: Bowl of Erithrina wood and below: Kitosh Lyre made by Joshua Machukhu, Kitale, Kenya, played by him on '26.1.49' (Eaton Collection, UP Repository).

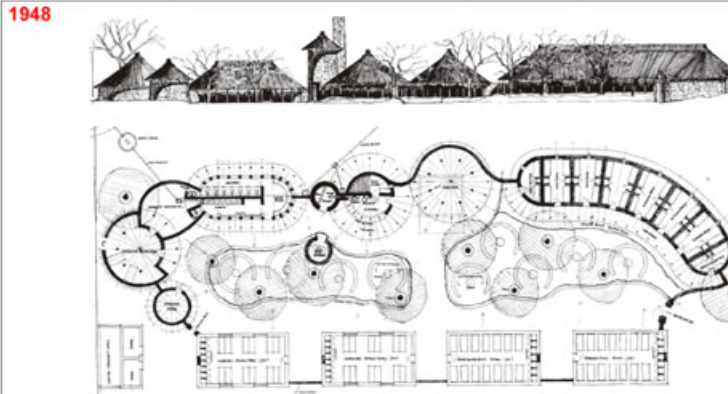


1950
Above: A loose page dated 23/1/1950 in Eaton's documents, showing a typical Chembe dwelling at Lake MacClean, Lake Nyassa (Eaton Collection, UP Repository).

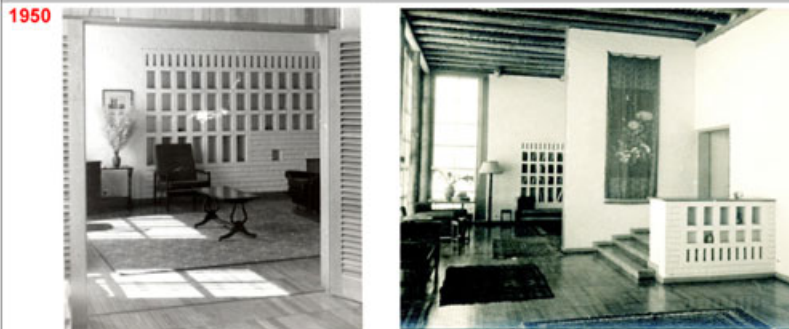


Above: Photographs from Eaton's photo album (1950) from his travels to Witu, Gedi, Malundi, Mombasa, Lamu in Kenya and Entebbe in Uganda (Eaton Collection, UP Repository).

Chronology of projects by Eaton with African references of texture, pattern, form or space.
The list is not exhaustive, but rather attempts to make an African lineage visible.



1948
Above: African Compound, Pretoria Country Club, Pretoria (1948-49).



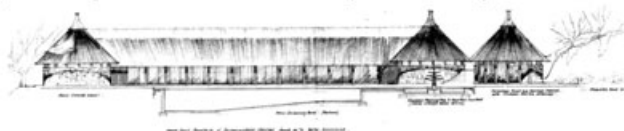
1950
Above: Living-room of House Anderssen, The Willows (1949-50) (Harrop-Allin, 1975:45).



Above: The Greenwood Village (1948-51). Photo left: Eaton Collection, UP Repository. The photo to the right is from Harrop-Allin's personal collection.



1951
Above: Layout of the grounds of the Pretoria Country Club as at July 1951.



Above: Swimming Pool change rooms and squash courts (1951) at the Pretoria Country Club.

KEY WORDS: African lineage: Chronological sequence of African travels and related projects

AFRICAN LINEAGE **4**

African References: Chronological selection of African travel sketches and photographs by Norman Eaton

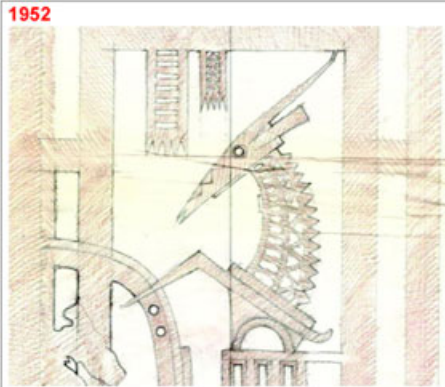


Above: A photograph from Eaton's collection of a Mapoch Kraal, Baviaanspoort (c.1950).



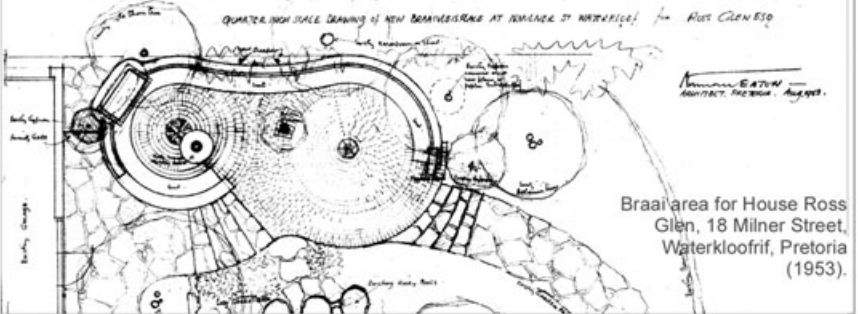
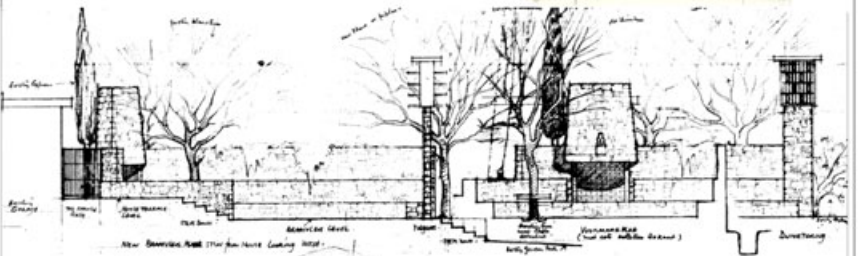
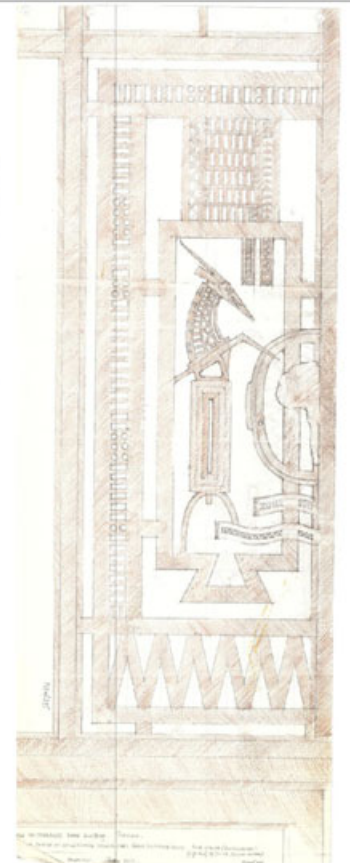
Above and below: More photographs from Eaton's photo album from his travels to Witu, Gedi, Malundi, Mombasa, Lamu in Kenya and Entebbe in Uganda. Most of the images for the album are repeated at two scales: a smaller, thumbnail to one side and an enlarged image adjacent to it – as seen in the top image. He documented ruins, entrance articulation, doors, windows, textures, streets and objects of interest.

Chronology of projects by Eaton with African references of texture, pattern, form or space. The list is not exhaustive, but rather attempts to make an African lineage visible.



Above and right: African heraldry – Eaton's 1:1 drawings of the massive bronze panels for the Netherlands Bank (1952–53).

Left: The door handles of the main entrance to the Netherlands Bank: two Benin figure heads (1953).



Braai area for House Ross Glen, 18 Milner Street, Waterkloof, Pretoria (1953).



KEY WORDS: African lineage: Chronological sequence of African travels and related projects

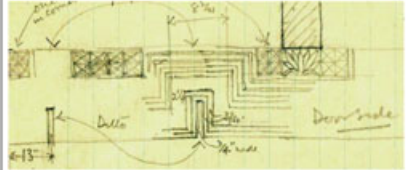
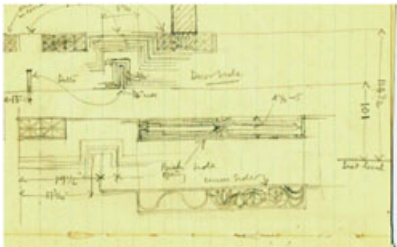
AFRICAN LINEAGE **5**

African References: Chronological selection of African travel sketches and photographs by Norman Eaton

1950

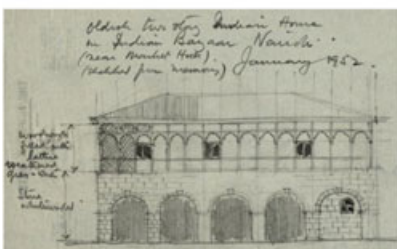


Above: Photograph from Eaton's travels to Witu, Gedi, Malundi, Mombasa, Lamu in Kenya and Entebbe in Uganda (Eaton Collection).



Above: Sketches of the relief work on a seat that Eaton had documented on the eastern Africa trip to which the previous series of photographs belong (Eaton Collection).

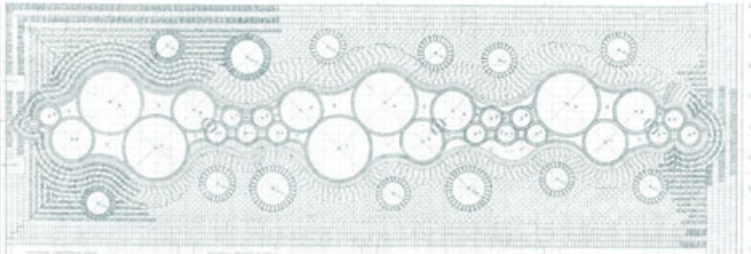
1952



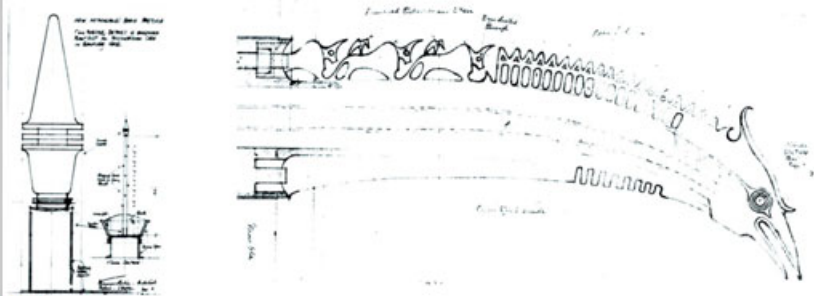
Eaton's drawing of the 'oldest two storey Indian House in Indian Bazaar', Nairobi (January 1952) (Eaton Collection).

Chronology of projects by Eaton with African references of texture, pattern, form or space. The list is not exhaustive, but rather attempts to make an African lineage visible.

1954



Above: Spinal screen wall, pools and planter boxes of the main light area between the office wings of the Netherlands Bank (1954), details below from 1954–1955 (Eaton Collection).

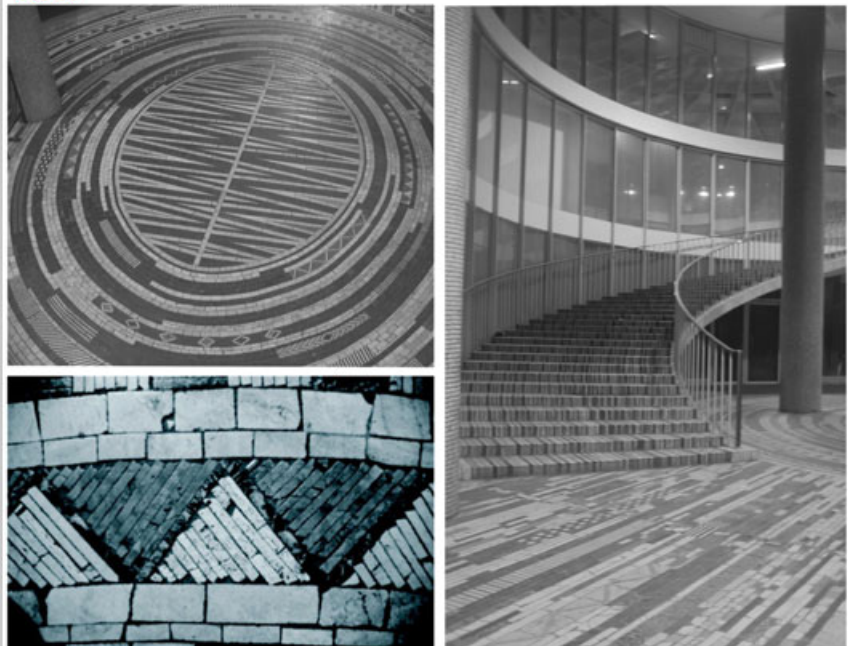


1955



Left: Interior detail of a seat in the Netherlands Bank, Pretoria and right, specially manufactured brick skin of the Bank (1946–1955) (Photos by Morné Pienaar).

1955-60



Central staircase and floor mosaic – Polley's Arcade (1957-1959), Pretoria (Photos: Morné Pienaar).

KEY WORDS: African lineage: Chronological sequence of African travels and related projects

AFRICAN LINEAGE

African References: Chronological selection of African travel sketches and photographs by Norman Eaton

Chronology of projects by Eaton with African references of texture, pattern, form or space. The list is not exhaustive, but rather attempts to make an African lineage visible. Drawings or photos from UP Repository unless otherwise stated.

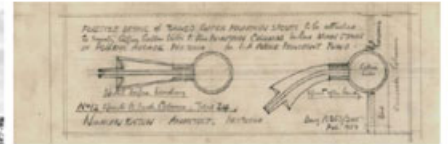
1959-65
Below: Polley's Arcade (1957-1959), Pretoria (Images author's own).



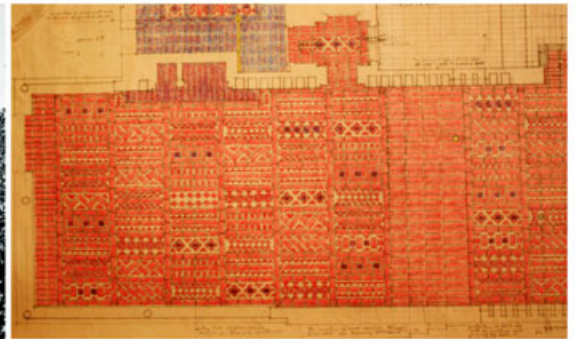
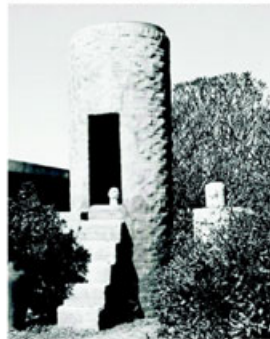
Below: Cul-de-Sac, Waterkloof, Pretoria (c. 1960)(Harrop-Allin,1975:161).



Below: Turned copper fountain spout detail below the main stair of Polley's Arcade (1959).



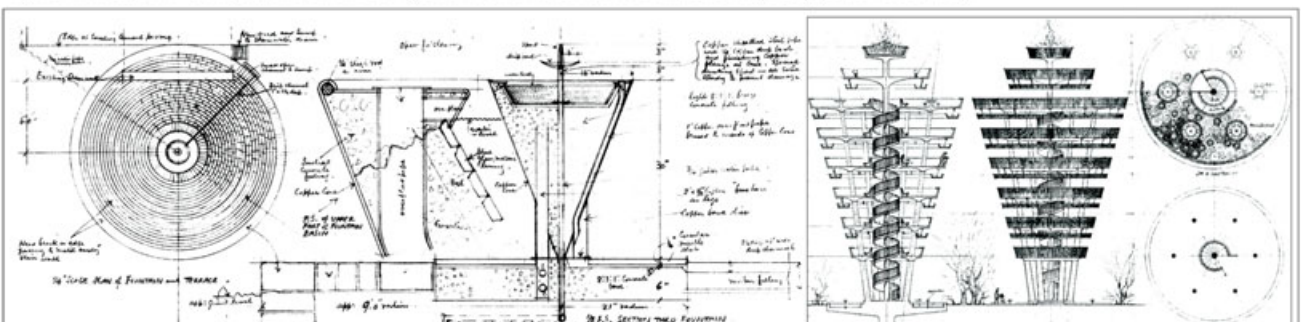
Below Left: House Esias Bosch (1961) and right: The Courtyard/Moolman House brick carpet(1961).



House Van den Berg (1964) interior recessed brick work and exterior view with conical shapes defining the termination of walls (Photos from the Eaton Collection).

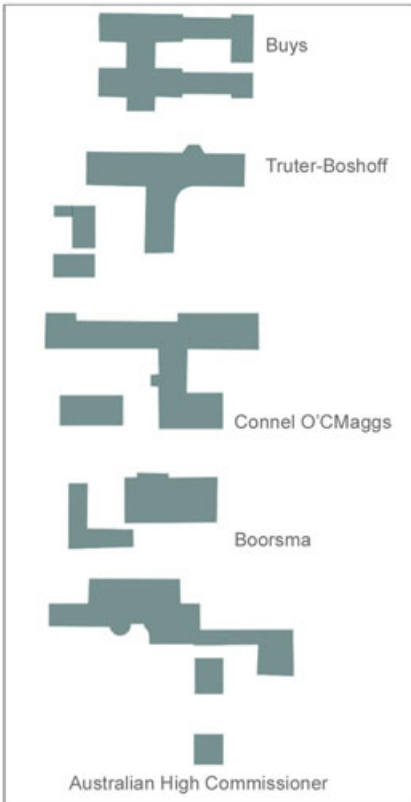


Above: The glazed tile screen of the Netherlands Bank, Durban (1965) that was literally woven around the structure (Photos: Morné Pienaar). Above right: The carpet of brick patterns on the roof garden of the Netherlands Bank, Durban (1965) (Eaton Collection).

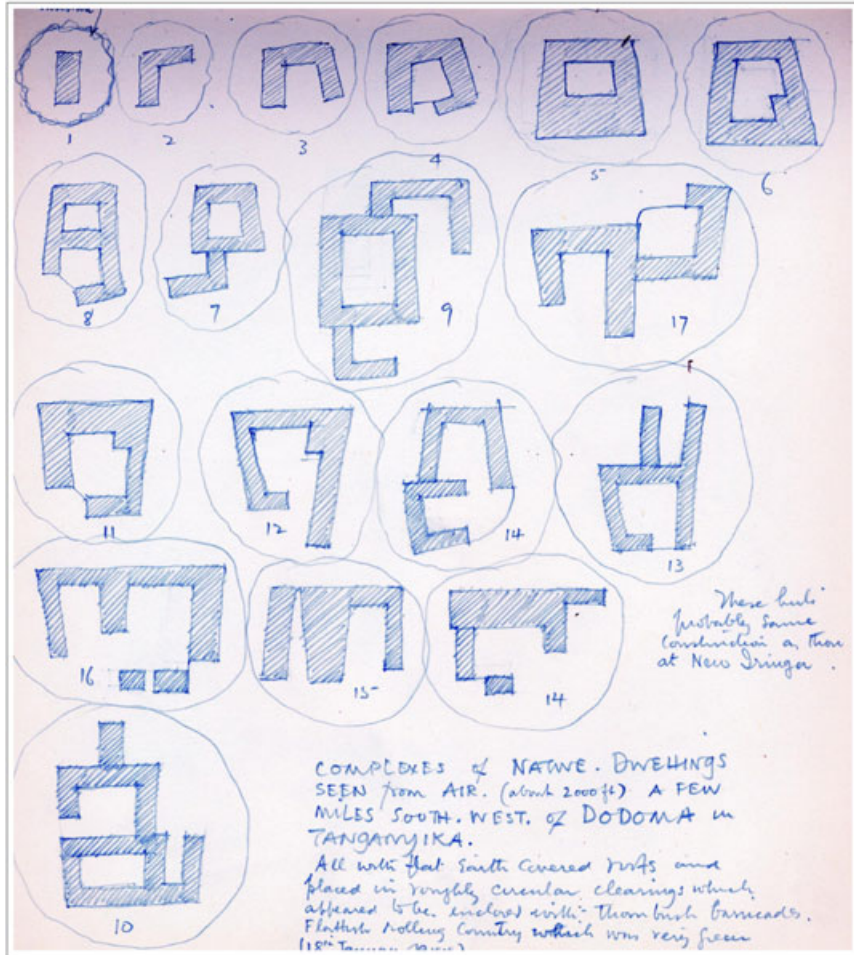


To the left: Drinking Fountain (1960) at Boys' High and to the right, at a completely different scale: The design entry for the Afrikaanse Taalmonument Competition (1965).

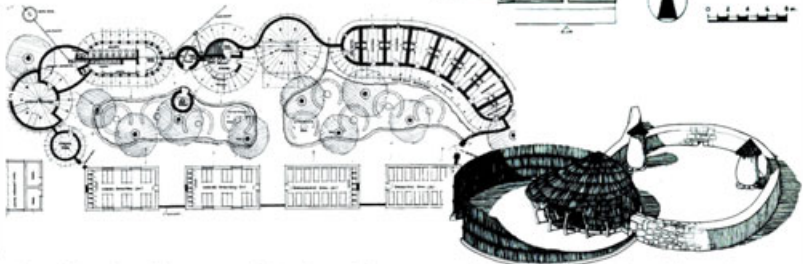
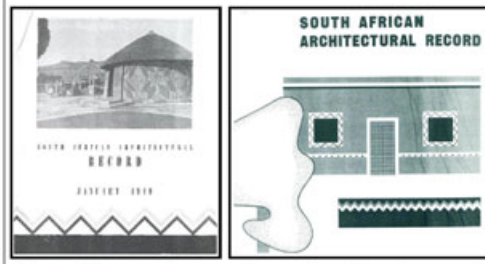
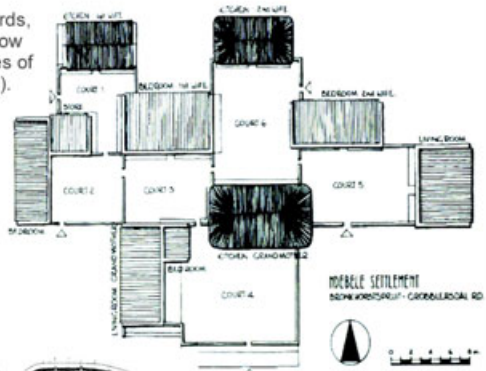
African References: African travel sketches by Norman Eaton and a small selection of publications from the 1940s.



Above: An extract from Eaton's residential plan typologies from 1941 onwards (by the author) and to the right, an extract from Eaton's 1943-44 Africa diary, showing 'Complexes of Native Dwellings seen from the Air' a few miles south west of Dodoma in Tanganyika (Eaton Collection, UP Repository).



Right: A Ndebele Settlement with a series of inter-connected pavilions and related courtyards, defined and connected with low binding walls, forming a series of thresholds (Frescura, 1983:39).



Above left are only two of several publications on local traditional architecture of the time: The covers of the January 1949 and November 1940 South African Architectural Records respectively. Well-known African architectural historian Betty Spence wrote the main article of the 1940 journal on 'Native Architecture' influenced by Europe. The other is by equally well-known James Walton, entitled 'South African Peasant Architecture', which explored various indigenous building types and patterns. To the right, top is the African Compound (1948) at the Pretoria Golf Club by Eaton and to the right directly above a Tswana Bilobial hut configuration circa 1960 (Frescura, 1983:40).

4.3. Plan as generator: typological lineages

The Plan is the generator. Without a plan, you have lack of order, and willfulness (Le Corbusier, 1927; 1974:8).

Eaton's sketches of 'Complexes of Native Dwellings seen from the Air' from his 1943–44 Africa diary (Eaton Collection, UP Repository), initially set the scene for a typological analysis of his plans.

Based on further evidence of his drawings (see also Appendix D), it became apparent that the plan was the generator of the architectural idea for Eaton – much as it had been for Le Corbusier, but also for Wright (Laseau, Tice, 1992). The plan is the origin of the structure that could develop into three-dimensional reality and dictate the detailing of texture and material. In all his drawings, Eaton placed a higher value on the plan than on picturesque expression; he also placed a higher value on the plan than on perspective drawings. Eaton had explained (with reference to the Netherlands Bank, Pretoria) that the *rationale* behind an overall design was about being 'scientific' (Harrop-Allin, 1975:90): planning and co-ordination of spaces came first. Along with climatic conditions and material, it resulted in form-giving that would not be stylistic or result in contrived architectural devices, but would be an empirical result of design resolution.

The following analysis is a chronological setting out of the various typological formations discovered in the domestic work of Eaton. The purpose of the typological analysis was to establish in which way Eaton's design approach evolved over time and in which ways it stayed the same. The study of plan typologies also allowed for an extraction of regional, African and international influences.

- Only residential work was selected for this **visual analysis**, as Eaton's public and institutional work was too varied in programme, scale and context, hampering comparative speculation.
- The analysis documents building plans only, on the same scale and all oriented north, from 1930 to 1964.
- Though this typological mapping is by no means exhaustive, it aims to provide broad insights into Eaton's domestic work and contributes to a better understanding of his designer's mind.
- Obviously, each architectural plan cannot convey the complete three-dimensional complexity of an entire building.
- The typological lineage maps 64 of the 97 residential projects in the UP Repository in chronological order and on the same scale.
- The 64 projects were selected because they are of stand-alone designs (as opposed to alterations and additions) and because they best represent his residential work.

Formal spatial groupings or types that were recognizable in his residential work are:

1. **The Letter-type**
2. **The Centralized Prism**
3. **The Centrifugal prism**
4. **The Additive rectangle**
5. **The Village typology**

Each of the above is described in the following pages. A shared attribute that is highlighted in the visual mapping, relates to a defined outside perimeter or extended field beyond the envelope of the building.

4.3.1. Typology: Letter-type

Description

The letter-type plan typology is inherited from the Cape Dutch tradition where plan width was determined by the standard lengths of timber beams used for thatch roof construction.

Attributes

- Central living room oriented north and expressed as open volume with exposed trusses
- Usually thatch roof construction which determined the plan configuration
- Either symmetrical Cape Dutch derivations, or asymmetrical Arts-and-Crafts informality
- Platform stoep, verandah, pergola
- Recessed loggias
- Built-in benches outside
- Windows with louvres
- Baroque-inspired chimneys
- Overall simplicity
- Defined outside perimeter/courtyard
- Usually single storey
- Bagged and whitewashed walls or rustic facebrick

Notes on the letter-type typology

All the attributes listed above are in line with those aspects that define a so-called Pretoria Regionalism or Third Vernacular (Fisher *et al*, 1998:125).

The Van Wouw House is arguably the best example from this typology and probably also the only house that is preserved in its original state.

4.3.2. Typology: Centralized prism

Definition

A centralized prism is a singular, compacted architectural form with central focus and limited or no extension beyond the building envelope.

Attributes

- One architectural mass, with limited or no extensions beyond the building envelope
- Compact, centralized plan, sometimes with a binding wall element or covered inside-outside stoep/loggia/porch/verandah
- Major focus on living areas, from where everything else is arranged
- Flat, concrete or pitched metal roofs
- Bagged, plastered or rustic brick finish
- Single- or double-storey

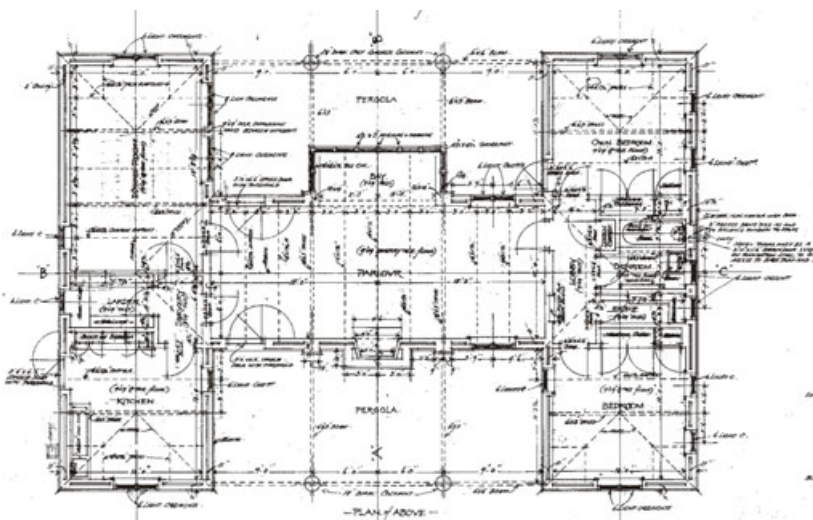


Figure 124: A typical letter-type plan, the Laurels Cottage for Mr Price (1930).

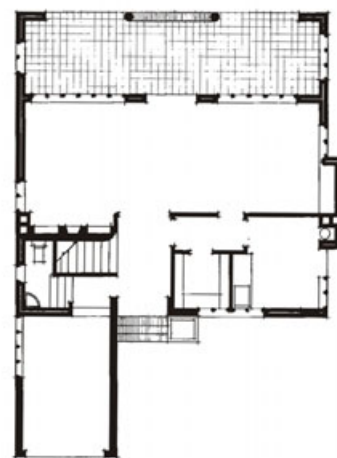


Figure 125: House Rademeyer (1935) is an example of a typical centralized prism typology, the least used by Eaton.

Notes on the centralized prism typology

Eaton did not employ this typology often, as it lacks the usual connectedness between inside and outside that he seemed to value. In addition, a more attenuated plan was climatically better suited to the region. Life in South Africa had also revolved around domestic help. The acceptable relationship of servants' quarters to the house was across a kitchen courtyard, which would provide the back or servants' entrance.

The only unusual plan from this particular typology, is that of House Smit which is unlike all Eaton's other work.

4.3.3. Typology: Centrifugal prism

Definition

A centrifugal prism is established when an outward force rotates around an axis or focused datum, so that the building envelope extends to peripheral incidents around the extremities of the compact plan. Concentration around one compact point is therefore disintegrated through a careful composition of parts beyond the building envelope.

Attributes

- A central prism-like or compact building mass with a second or third mass extending from it, usually linked with a binding wall(s) to create courtyard space(s) in-between.
- Binding wall would often sub-divide space internally, while extending beyond the envelope externally as binding device.
- Besides short/compact plans, the overall composition is also compact, as opposed to being elongated.
- Servant spaces would be reserved for the secondary building masses linked to the main house with the binding wall.
- Sometimes vertical accent rather than horizontal, with emphasis on chimney.
- The outside perimeter is defined within a regular field or orthogonal grid or contained by low site binding walls.
- Usually reserved for double-storeys.
- Zoning is normally divided vertically, with living spaces on one level and private/bedroom spaces above.

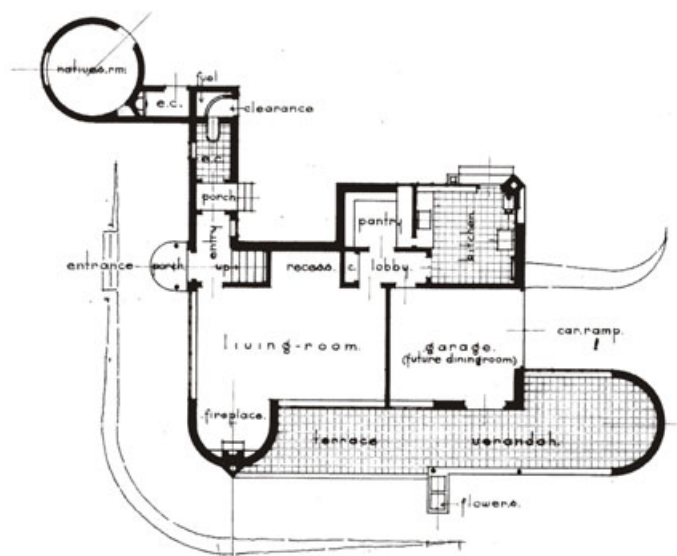


Figure 126: House Boyes (1934) is an example of a typical centrifugal prism.

4.3.4. Typology: Additive rectangle

Definition

An elongated, rectilinear composition where all parts are bound along a central axis or base line that determines the disposition of a primary longitudinal volume and serves as foil for secondary cross-axes. Courtyard spaces are created in-between building masses.

Attributes

- A relationship between building form and landscape is enhanced through the positioning of massing – energy is focused outward to the landscape.
- Attenuated plan types ideal for climate, also allowing more exposure to north.
- The living, dining, sleeping areas often occupy a ‘head’ with servant or guest quarters occupying a ‘tail’.
- Half-level differences articulate different zones and adds complexity to the overall scheme.
- The outside perimeter is defined within a regular field or orthogonal grid and contained by low site binding walls.
- Open plan is reserved for living and or dining areas that are interlinked.
- Corridors are spatial connectors and dividers usually reserved for single storey types.
- Walls are often used as central binding axis, divider and also become utilitarian inside the

house.

- Usually horizontality is offset with vertical chimney axis.
- In Eaton’s later work, formal distribution hints at Ndebele settlement, with the creation of series of interconnected courtyards and interlinked pavilions.
- Usually pitched metal (or thatch during the war) roofs with overhangs, always stronger horizontal emphasis.

4.3.5. Typology: Village typology

Definition

The village typology is a direct or indirect translation of an African homestead, where formal distribution is around a common space, similar to the *khotla* as seen in the traditional homesteads of the Sotho/Tswana of the northern Cape and the western and northern provinces.

Attributes

- Morphological arrangement around a central space
- Forms are either organic and circular, or rectangular and geometrical
- Different hierarchies expressed in varied scale
- Forms are usually bound together with a low wall or horizontal field
- Organic, circular form is usually expressed in stone and thatch.

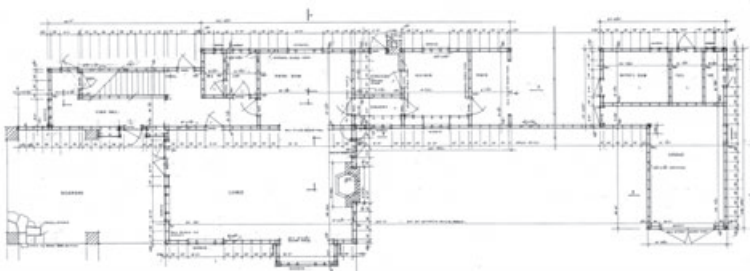


Figure 127: The Anderssen House (1939) is an example of a typical plan configuration of additive rectangle.

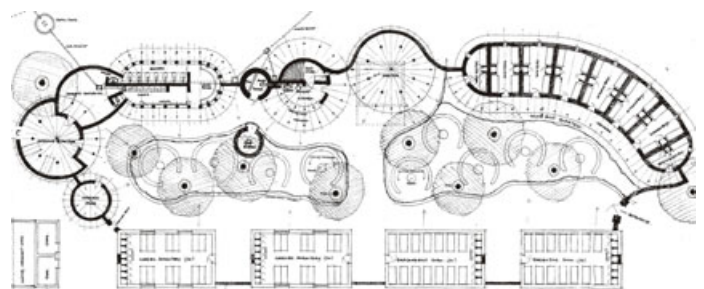


Figure 128: The design of the African Compound at the Golf Club (1948) is a typical village typology.

1930–1940 PRE-WAR YEARS

1930–1937

The table to the right (over several pages) shows 64 of Eaton's residential project plans:

- in chronological order
- on the same scale
- all oriented with north pointing upwards.

Each plan-type was described in the preceding text, highlighting major attributes.

The table to the right demonstrates that Eaton's earliest work was more traditional, especially evident in the use of the letter-typology. He continued to make use of the letter-type plan in the following years – over time, the plans became more complex and organic.

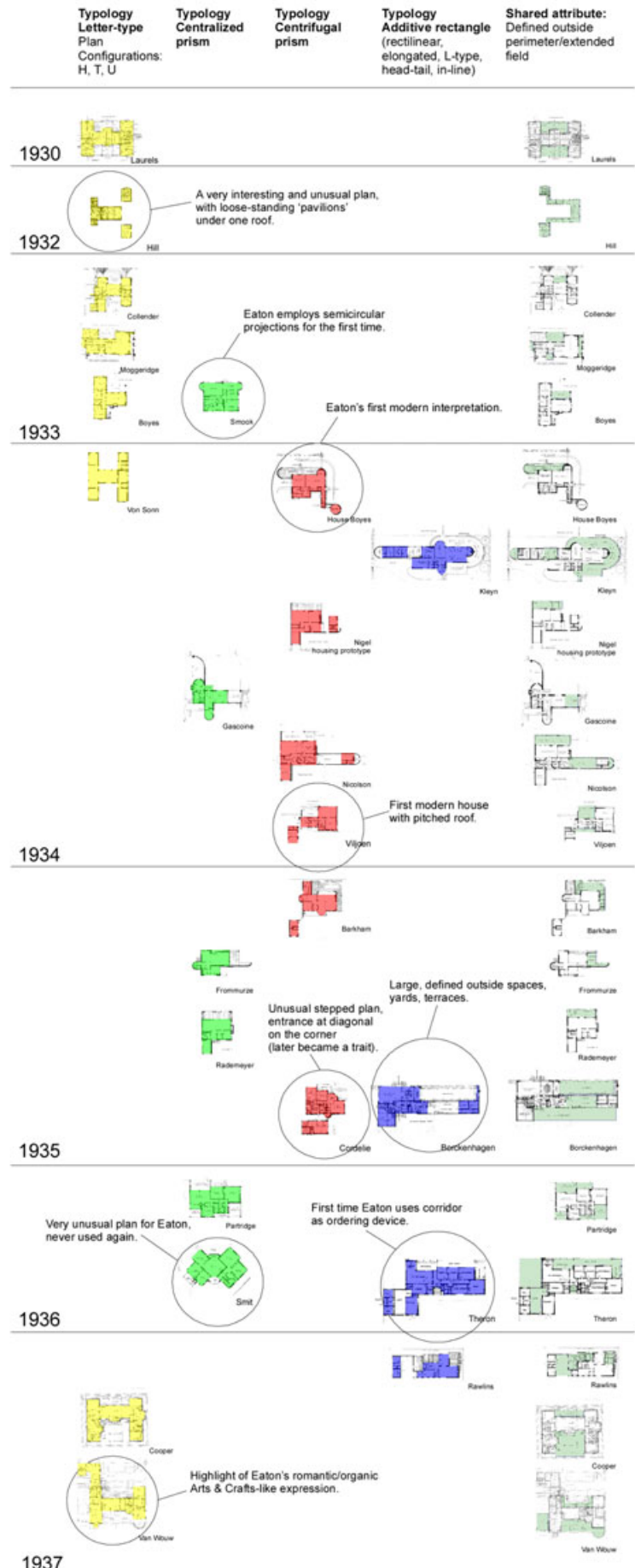
It is interesting to note that houses started to increase in size following the early 1930s depression.

What also stands out from the table, is the increase in the scale of defined outside perimeter and the relationship between building mass and outside spaces.

Forty projects are represented in the table from 1930 to 1940. Of the 40 projects,

- 10 reflect the traditional letter-type,
- 9 the centralized prism,
- 9 the centrifugal prism and
- 12 the additive rectangle.

House Van Wouw (1937) is probably the best example of a traditional, romantic expression.



1930–1940 PRE-WAR YEARS

1938–1940

House De Loor (1938) is one of the best examples of an organic architectural approach with attenuated, complex plan and resultant section(s).

Of particular interest, is Houses Hamilton (1939) and Teichman (1940), both represent a traditional letter-type, but also a seemingly conscious attempt to evoke a Ndebele settlement. Gerard Moerdyk discussed the arrangement of *rondavelhuise* in the *Die Boerevrou* (December 1921; 1989:18-9) where he suggested a similar arrangement for rondavels, literally to evoke an African settlement.

An increasing overlap of inside-outside spaces, with loggias, stoeps and verandas that are placed to respond to the specifics of the site, became more prevalent.

Note the increase in scale of outside, defined spaces.

Typology
Letter-type
Plan
Configurations:
H, T, U

Typology
Centralized
prism

Typology
Centrifugal
prism

Typology
Additive rectangle
(rectilinear,
elongated, L-type,
head-tail, in-line)

Shared attribute:
Defined outside
perimeter/extended
field

An unusual plan for Eaton: a Citrohan derivative, in the Le Corbusier idiom.

House for Bram Fischer: a Wrightian idiom.

Probably best example of an organic, complex plan. Entrance along diagonal line where legs of the L-shape come together.

Similar to House Cordelle, compact, stepped, with diagonal entrance.

1938

Sunken courtyard as threshold, later additions are similar to traditional settlement patterns.

Note the scale of the house for Battiss.

The only timber/thatch house Eaton ever did.

1939

A duplicate of the same plan!

Built to respond to its immediate neighbour: House De Loor, pictured to the right.

Cottage Teichman reminds one of traditional Ndebele space-making patterns.

1940

1947–1964 POST-WAR YEARS

1951–1964

Typology
Letter-type
Plan
Configurations:
H, T, U

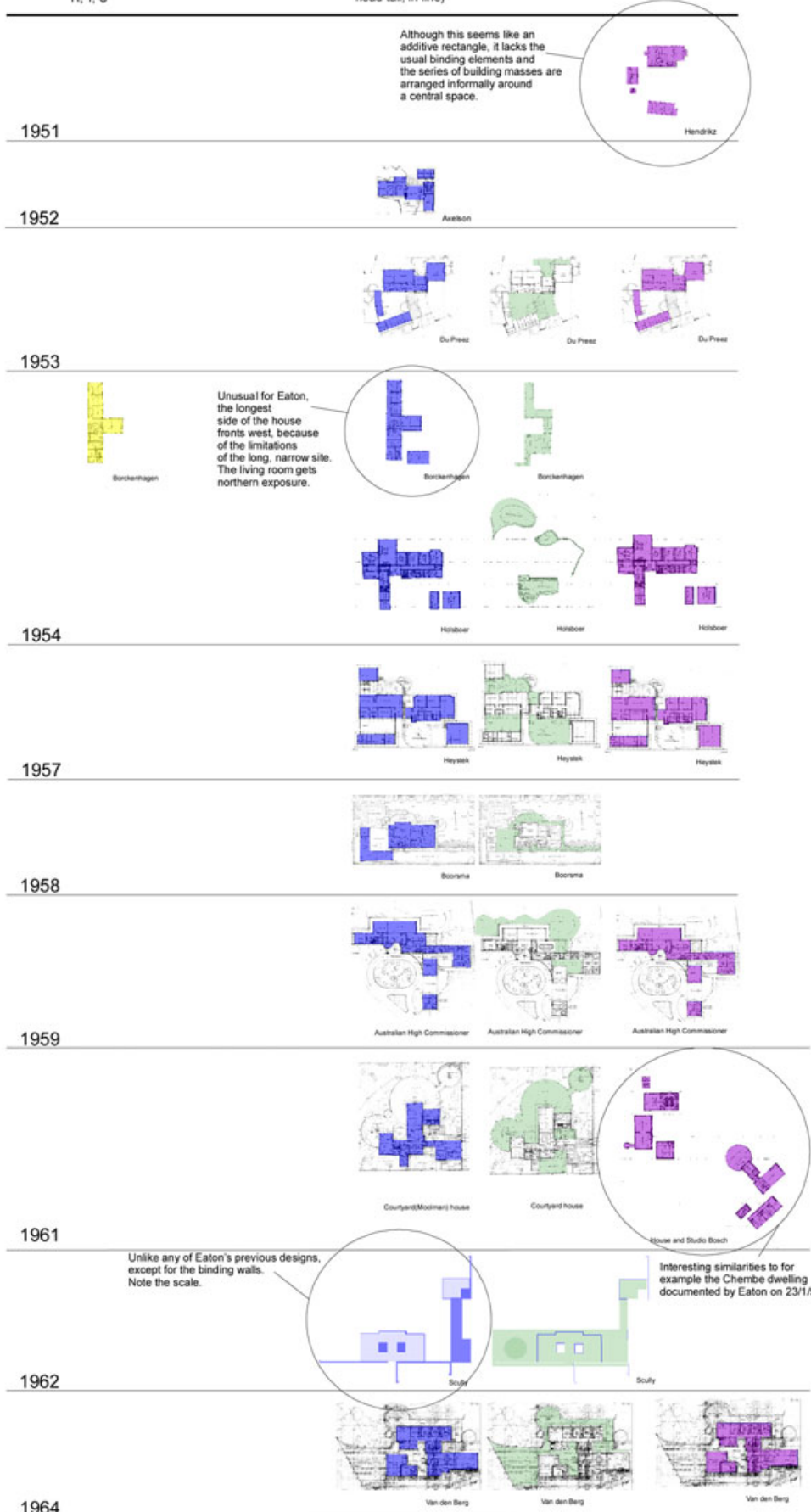
Typology
Centralized
prism

Typology
Centrifugal
prism

Typology
Additive rectangle
(rectilinear,
elongated, L-type,
head-tail, in-line)

Shared attribute:
Defined outside
perimeter/extended
field

Village Typology



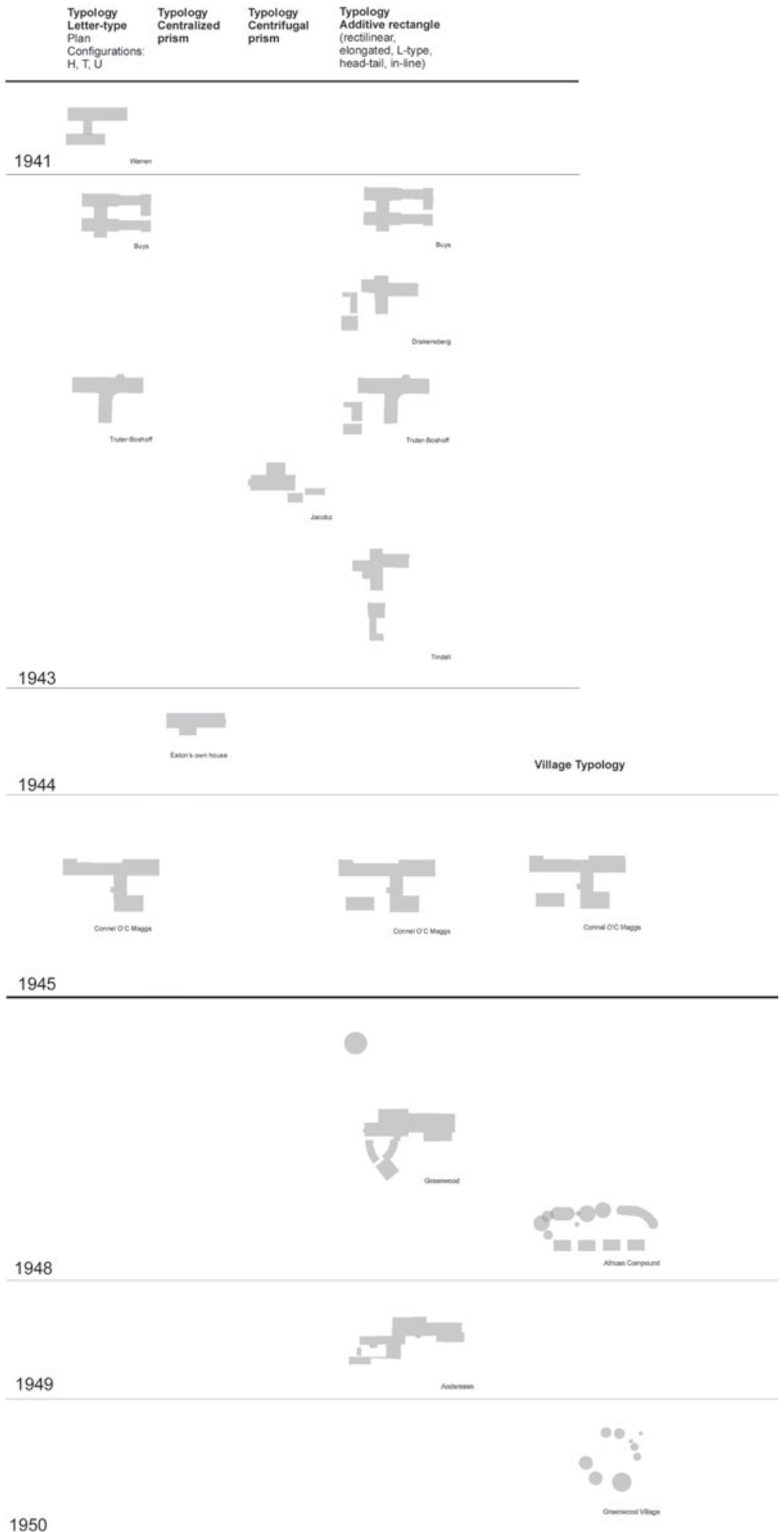
1930–1940 PRE-WAR YEARS

A duplicate of the coloured typological lineage, this time without comments, to enable a better 'reading' of the sequence of plans at a glance.



1941–1946 WAR YEARS

A duplicate of the coloured typological lineage, this time without comments, to enable a better 'reading' of the sequence of plans at a glance.



1947–1964 POST-WAR YEARS

1947–1964 POST-WAR YEARS

	Typology Letter-type Plan Configurations: H, T, U	Typology Centralized prism	Typology Centrifugal prism	Typology Additive rectangle (rectilinear, elongated, L-type, head-tail, in-line)	Village Typology
1951					Handrikz
1952				Aasbos	
1953	Boschenhagen	Boschenhagen		Du Preez	Du Preez
1954				Holboer	Holboer
1957				Hayek	Hayek
1958				Soosne	
1959				Austhellen High Commissioner	
1961				Courtyard(Koosmar) house	House and Studio Bosch
1962				Souly	
1964				van den Berg	van den Berg

4.4. Summary of key findings from the distillation of motifs, African lineage and typological lineage

4.4.1. Summary of findings:

Visual distillation of motifs

Unique features in the work of Eaton were extracted and visually distilled in a series of motif sheets. Motif sheets give access to themes and patterns of ideas in his work, recognizable at a glance. Characteristic features were described in detail in Chapter 3 under each individual project. The visual distillation of his work, along with the work of his contemporaries, allows open-ended interpretations. Through juxtaposition with both national and international work, the distinction of Eaton's work in the international arena becomes clear. It also contextualizes his work within the *esprit de système*.

Themes were traced roughly in chronological order, so that the shift in Eaton's approach becomes visible. Therefore, themes in Eaton's work range from his earlier to his later work in the following order:

Cape Dutch architecture—Arts and Crafts—Romanticism—Expressionism—Modern Movement—Italian Renaissance—Regionalism—Brazilian architecture—Pretoria Vernacular.

In addition, the juxtaposition of Eaton's work with the work of his peers, clearly demonstrates the increasing individuality in his work over time.

4.4.2. Summary of findings:

African translations

The chronological sequence of Eaton's African travels and the subsequent translation of his observations into built form, were analyzed in an attempt to access his designer's mind. The series of African motif sheets demonstrate Eaton's handling of texture, material, craft and form-

giving in relation to influences from the continent.

The first evidence of an African sensibility in Eaton's work can be found as early as the 1930s, through the translation of textures. Textures were initially vertical wall renditions, but over time also became horizontally binding fields between inside and outside and between nature and man-made. Textured planar fields for interiors were always carefully considered to complement hierarchical differences in space and to render meaning to surfaces. Eaton either used locally manufactured facebrick or glazed tiles, both often custom made, to emulate woven textures as documented in his sketch books. Details take on several forms, most notably differentiated by objects (door handles, furniture, light fittings, water spouts) and surfaces (floors and walls) – which compliment the modernist structure of space.

Selective object detailing has a strong African reference, which can sometimes be traced directly to a sketch from his diaries, especially from the 1950s onward. The objects, however, lose their sense of being curios, never falling victims to becoming Disneyfied architectural souvenirs. Eaton was not interested in rhetorical exuberance: objects were rendered in a restrained way and as carefully considered articulation of architectural elements in an overall considered composition. All textures and ornament would conform to the outline of a precise geometry, especially in his later work.

With exceptions, Eaton would very seldom use African organic form-giving in the overall architectural massing of his work, rather translating organic form to planar fields. When he did apply African form, however, allusion to the African homestead would be offset with rigid standardized structures. Similar to Aalto, Eaton had recognized that by making and juxtaposing forms that are more individual, the rigours of didactic form give way to warmth, richness and emotion.

4.4.3. Summary of findings:

Typological lineage

Since the plan was the generator of form in Eaton's work, the chronological setting out of the various typological formations in its lineage, was especially valuable towards enabling further analysis. Formal spatial groupings or types that became recognizable are:

1. The Letter-type
2. The Centralized Prism
3. The Centrifugal prism
4. The Additive rectangle
5. The Village typology

While Eaton's early designs oscillated between the first three types of configurations, his designs became increasingly more complex, yet simple, amalgamations of formal diagrams. The typology that Eaton ultimately used the most in his designs was the 'additive rectangle'. Appropriate for the local climate, this typology consists of an elongated, rectilinear composition that Eaton positioned such as to optimize northern expo-

sure. Outside spaces are created in-between building masses, recalling Ndebele settlement patterns.

Since the typological analysis of his work was done chronologically and on the same scale, it clearly demonstrates how his designs increasingly extended beyond the building envelope to include a defined outside perimeter. The relationship between building form and landscape is enhanced through the positioning of massing and energy is focused outward to the landscape.

While his use of sinuous line was an initial African translation of Brazilian influences, he later transformed the sinuous line to a disciplined geometry of repetitive circles and semicircles that was used to define outside perimeters, while regular geometries were used to define building envelopes.

An extract from Eaton's 1943–44 Africa diary, showed his sketches of 'Complexes of Native Dwellings seen from the Air' (Eaton Collection, UP Repository). It bears compelling resemblance to the plan typologies that characterize his work from the mid-1940s onwards.



CHAPTER 5

RECAPITULATION, CONCLUSIONS AND RECOMMENDATIONS

5.1. Recapitulation

The main problem investigated in this study was formulated in this question: **a. Why and how does the domestic architecture of Eaton express its lineage of forms, space, material and detail?**

Result of the problem:

The chronologic analysis of the drawings of Eaton's built and unrealized residential projects, together with his travel diaries, sketch books and photo albums, as preserved in the Eaton Collection (UP Repository), enabled formal, spatial, material and detail reading of his work.

Chapter 2 described the contextual setting of Eaton's work, while **Chapter 3** set out the chronological lineage of his residential work. Unique features in his work were extracted and visually distilled in a series of motif sheets in **Chapter 4**. Themes were traced in chronological order, so that the shift in Eaton's design approach became visible.

The investigation found that Eaton's work was part of an *esprit de système* that had a direct or indirect manifestation in his work, resulting in references to the work of other architects of his time. In addition to his classical architectural schooling, being in Pretoria and surrounded by influential personalities, he was heir to a unique response to place, material and cultural values.

Above all, Eaton was a keen observer of his environment, as drawn from the series of diaries and travel sketches from the Eaton Collection, UP Repository. Unlike his architect peers, he had deliberately sought out African motifs on repeated trips along the African eastern coast,

which he had been able to abstract and translate into built form within the ambit of the Modern idiom. He was a disciplined and rigorous observer of detail and texture, and together with sensitivity to design problems, the outcome was a restrained response to African qualities.

Evidence of an African sensibility in his work was found as early as the 1930s through the translation of textures. Eaton used locally manufactured facebrick or custom-made glazed tiles to emulate woven textures, purposefully metaphorizing African patterns of tribal grass, weaving and surface reliefs.

Over time, his designs became increasingly individualized with sublimation of African motifs, which set his work apart from his contemporaries.

His best work seem to have an enduring quality, possibly traced to a combination of underlying classical formal references, restrained textural renderings and compositional detailing, resulting in enriched, humane and articulated surfaces and spaces with no rhetorical exuberance.

b. Sub-problem: Why and how did place and process influence his 'designer's mind'?

A brief description to place and process introduced the context to Eaton's domestic design *oeuvre* in **Chapter 2**, before each project was set out in chronological order to trace the process of evolution of his built work in relation to the particularities of place in **Chapter 3**.

Result of the problem:

Like his fellow Pretorians, Eaton was aware of a particular sense of place, unique to the city.

He inherited a place-specific approach to architecture rooted in African soil and was surrounded by a circle of friends whom had included prominent artists whose work all responded to a sense of being on the African continent, and for whom he had designed dwellings.

Place had had profound influence on his evolutionary response to landscape, climate, material and formal choices throughout his career. He had done careful surveys of sites to which his designs would respond with an increasing 'will to form' over time. Urban projects would equally respond to the man-made landscape. His designs in different locations showed a response to the unique traits of those places, especially evident in the difference in articulation between the Pretoria Netherlands Bank (1946–1955) and the one in Durban (1960–1965).

His designs were a culmination of chronological lineage, with growing integration of man-made and nature through horizontality and attendant textures and material uses. Dwellings increasingly responded to the openness of the landscape and being on the African continent. Combined with local materials and craftsmanship, constant nuanced references to vernacular architectural elements (e.g. Cape shutters) prevailed.

c. Sub-problem: What are the critical moments in Eaton's development and thinking?

The chronological review of Eaton's work and subsequent extraction of motif and typological lineage enabled an extraction of critical moments in the development of Eaton's 'designer's mind' – summarized at the end of **Chapter 3**, and distilled visually in **Chapter 4**.

Result of the problem:

A chronological study of his residential drawings made it possible to distinguish three periods in his design process, namely:

- 1930–1940: The pre-war period
- 1941–1945: The war period
- 1946–1966: The post-war period

The critical moments in each period were summarized at the end of **Chapter 3**, and resultant significant formal spatial groupings or types in his design *oeuvre* were unpacked in **Chapter 4**.

d. Sub-problem: What do we learn from Eaton as a designer towards the creation of an appropriate South African domestic architecture?

Result of the problem:

- Eaton's designs were, without exception, appropriate for the local climate.
- He used local craftsmanship and materials innovatively.
- Life in South Africa is spent out of doors. Eaton responded by creating appropriate outside living spaces – loggias, stoeps, verandahs – and ultimately extensions of all interior space that responded to the open landscape.
- His design field therefore extended beyond the building envelope, but instead of simply dissolving mass, outside perimeters were defined and integrated with the natural landscape.
- Walls, vegetation and textured horizontal fields were architectural devices that grounded dwellings in a Wrightian idiom. However, the definition of outside space recalled traditional, local settlement patterns of the Ndebele through scale, articulation, texture and spatial relationships.
- His designs are timeless because they are restrained. While he celebrated African form, space and texture, he never fell victim to Disneyfied architectural souvenirs or short-lived formal gimmicks.

- Textures gave a sense of uniformity and meaning to surfaces, and denoted hierarchies to differentiate spaces. Objects were subtly rendered as articulation of architectural elements in an overall composition. All textures and ornament conformed to the outline of a precise geometry in his later work.
- His controlled juxtaposition of didactic form resulted in rich spatial diagrams that recalled African motifs. Along with texture and subtle objectification, his work was imbued with emotion, warmth and an intangible African quality.

5.2. Conclusions

The legacy of documentation of Eaton's domestic *oeuvre* was appraised through the biographical-disciplinary context and chronology in order to analyse and discover the making of his 'designer's mind'. Key findings relating to motifs, African translation and typological lineage provided a particular reading of his work to enable the extrapolation of why and how his residential work relayed its denouement.

The study has confirmed the relevance of his architectural contribution, especially with regards to the enduring quality of his work and response to being on the African continent. Eaton's work is seminal, not only in the South African context, but also in the broader African and even international context. His work is imbued with qualities of resistance and response, sublimation and invention and set within increasingly important values of place, tradition, Modernity and identity.

On a personal note: As a student at the outset of architectural studies in the mid-1990s, the researcher certainly did not grasp the craft, spatial significance and timeless quality associated with the best of Eaton's work, especially upon first encounter. Similar to the work of Aalto – an ap-

preciation of his *oeuvre* was imbued as a result of years of growing in this profession, both in academia and in practice.

It was a privilege to have studied the drawings in the UP Repository, some of them truly great – a few come to mind immediately, such as the drawings for his Rome Scholarship entry (1928), his magnificent investigation of the ruins of the Ostia Baths (1930), the clarity of the early drawings and simplicity of designs such as those of House von Sonn (1934), the brick carpets and construction detailing of House Greenwood (1948–1953), the ease of the sinuous line in the African Compound design (1948), the brick carpets for House Moolman (1961) and so on. But not all of Eaton's work was excellent, some of it was indeed quite mediocre if one were to judge from the drawings only.

There is however, no denial of the timeless quality found in his built work, the humaneness of it and above all, an intangible quality unique to Africa. Upon visiting his best work, it is clear that Eaton understood the needs of people and their individuality first, as pointed out by his close friend Alexis Preller (Harrop-Allin, 1975:9).

Eaton appropriately used the word 'dwelling' and not simply 'house' to name the house he designed for the artist Esias Bosch (1961). Aptly, the word 'dwelling' was used by the phenomenologist Martin Heidegger (1889–1976) to capture the distinctive manner in which man meaningfully exists in the world: to dwell in a house is not merely to be inside it spatially. Rather, it is to belong there, to have a familiar place there (Heidegger in Nesbitt, 1996: 412–429) – something that can only be experienced from physically visiting his built work and cannot be gauged from his drawings alone.

5.3. Contributions

The study makes the following contributions:

- i. The chronological ordering of Eaton's records as preserved in the Eaton Collection.
- ii. An analysis of the chronology of work in relation to his evolution as designer, identifying the main traits of his approach.
- iii. An analysis of the chronology of his work in relation to influences of place and broader context.
- iv. An analysis of the chronology of his work in relation to an *esprit de système*.
- v. Providing an analytical tool for further studies.

5.4. Recommendations

- What possible contemporary readings and related research questions are made accessible through the study?
- What are the broader implications for architectural design and theory *in lieu* of this study?

While the study will be of benefit to the architectural fraternity at large in terms of accessibility to his domestic built *oeuvre*, it also opens opportunities for further studies.

This study is limited to a chronological and contextual analysis of Eaton's domestic work as preserved in the repository of his drawings. It is by no means exhaustive, especially since the drawings alone do not always convey the spatial complexities associated with a built product.

In addition, recommendations for further possible studies include, but are certainly not limited to:

- i. An extraction, appraisal and critical reading of his non-residential work as represented in the repository of his records.

- ii. While the 'Third Vernacular' refers to the regional architecture that developed in and around Pretoria in particular, a second generation used the latter as primary source to develop what Chipkin later referred to as the 'Johannesburg Vernacular' (See entry '**Johannesburg Vernacular** (1950s to 1970s)'). The influence of Eaton's work on subsequent design generations, perhaps including the work of Johannesburg architects like André Hendrikz, Donald Turgell, Mannie Feldman, Wibo Zwart, Jack Clinton, Michael Sutton, Mira Fassler-Kamstra and Marcus Holmes.

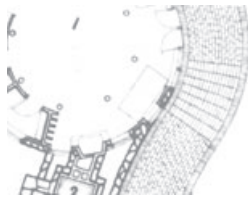
Another generation that might be considered for further study could include the likes of Peter Rich in Johannesburg and 'Ora Joubert in Pretoria, both of whom had responded to regional but also African sensibilities of place-making.¹

- iii. The poetics of construction as manifest in Eaton's work could be explored in relation to the work of his international peers as set out in Frampton's *Studies in Tectonic Culture: The poetics of construction in Nineteenth and Twentieth century architecture* (1995). Both Semper's and Loos' theories could afford a particular understanding of object, surface and space, which could in turn be brought in line with traditional African interpretations of the subject matter.
- iv. There is scope to unpack Eaton's work around topics of resistance and response in relation to architectural regionalism, identity, place-making, modernity and tradition.
- v. The role of art and architecture in light of identity and place-making could also be explored through his work and the work of his artist-contemporaries.



Figure 129: Drawings do not always communicate the warmth and emotive quality of spaces (Anderssen House, 1950. Eaton Collection UP Repository.)

- 1 See Johannesburg Vernacular (1950s to 1970s), Glossary of Architectural Style Terms, Appendix C for a description of the contributions by André Hendrikz, Donald Turgell, Mannie Feldman, Wibo Zwart, Jack Clinton and Michael Sutton. Refer to Appendix B for the short biographies of Mira Fassler-Kamstra, Peter Rich and 'Ora Joubert.


 CHAPTER 6
 REFERENCES

Primary source

The primary source for this dissertation was the drawings of projects in the Eaton Collection, Department of Architecture, UP. Personal papers, letters, autobiographical memorabilia, photo albums and other records of projects by Norman Eaton were also consulted.

Secondary sources

Secondary sources included the writing of others.

6.1. In-text works
Cited Articles/Papers by Norman Eaton

- Eaton, N. 'A country house near Pretoria' and 'A town house in Pretoria'. *SAAR*, May 1946: 108–110.
- Eaton, N. 1960. 'Art and Architecture'. *Fontein*, Vol I no1, Winter 1960:15–17.
- Eaton, N. 1965. 'Gordon Leith'. *SAAR*, May 1965:12,47.
- Eaton, N. 1966. 'Autobiographical notes'. *Pretoriana*, Issue nr. 52, December 1966: 53–54.

In-text Books on Norman Eaton

- Harrop-Allin, Clinton, F. 'Eaton, Norman Musgrave' in HSRC. 1987. *Dictionary of South African Biography* Volume V: 228–229. Pretoria: Human Sciences Research Council.
- Harrop-Allin, C. 1975. *Norman Eaton: Architect. A Study of the work of the South African architect Norman Eaton 1902–1966*. Cape Town and Johannesburg: C. Struik publishers.

In-text unpublished thesis documents
on Norman Eaton

- Harrop-Allin, C.F. 1972. *The work of the architect Norman Eaton: An art-historical study*.

Unpublished Masters' Thesis (M.A.), University of South Africa (UNISA). Pretoria.

In-text Books

- Biermann, V., Klein, B., Evers, B., Freigang, C., Gronert, A., Jobst, C., Kremeier, J., Lupfer, G., Paul, Jürgen, Ruhl, C., Sigel, P., Stewering, R., Thoenes, C., Zimmer, J. 2003. *Architectural Theory from the Renaissance to the present*. Italy: Taschen.
- Beyers, C.J., Krüger, D.W. (eds.). 1977. *Dictionary of South African Biography* Volume III. Pretoria: Human Sciences Research Council.
- Beyers, C.J. (ed.). 1987. *Dictionary of South African Biography*. Volume V. Pretoria: Human Sciences Research Council.
- Canizaro, Vincent (ed.). 2007. *Architectural Regionalism: Collected Writings on Place, Identity, Modernity, and Tradition*. Princeton: Princeton University Press.
- Chipkin, Clive. 1993. *Johannesburg Style: Architecture and Society 1880s–1960s*. Cape Town: David Phillip Publishers.
- Chipkin, Clive. 2008. *Johannesburg Transition. Architecture & Society from 1950*. Johannesburg: STE Publishers.
- Crowe, N. 1997. *Nature and the idea of a man-made world*. USA: MIT Press.
- De Kock, W.J. (ed.). 1968. *Dictionary of South African Biography* Volume I. Pretoria: Human Sciences Research Council.
- Deichmann, J.R., Van Schalkwyk, F. 'Preller, Alexis' in HSRC. 1987. *Dictionary of South African Biography* Volume V: 607–609. Pretoria: Human Sciences Research Council.
- Eliovson, Sima. 2003. *The Gardens of Roberto Burle Marx*. Portland, Oregon: Timber Press Incorporated.
- Ellis, Judith. (ed.). 1993. *Keeping Archives*. Melbourne, Australia: Thorpe.

- Fisher, R.C. & Le Roux, S. 1989. *Die Afrikaanse Woning. Herdrukke uit Die Boerevrou (1919–1931)*. Hammanskraal: Uni-book-Uitgewers.
- Fisher, R.C., Le Roux, S., Maré, E. (eds.). 1998. *Architecture of the Transvaal*. Pretoria: UNISA
- Frampton, K. 1995. *Studies in Tectonic Culture: the Poetics of Construction in Nineteenth and Twentieth Century Architecture*. Cambridge: The MIT Press.
- Frampton, K. 1980; 1992. *Modern Architecture - a critical history*. London: Thames and Hudson.
- Frampton, K. 1995. *Studies in Tectonic Culture: the Poetics of Construction in Nineteenth and Twentieth Century Architecture*. Cambridge: The MIT Press.
- Greig, D. 'Baker, Sir Herbert' in HSRC. 1968. *Dictionary of South African Biography* Volume I: 44–47. Pretoria: Human Sciences Research Council.
- Haasbroek, Hannes. 2011. *'n Seun soos Bram: 'n portret van Bram Fischer and sy ma Ella*. Kaapstad: Umuzi.
- Harmesen, F. 'Battis, Walter Whall' in HSRC. 1987. *Dictionary of South African Biography* Volume V: 36–37. Pretoria: Human Sciences Research Council.
- Harris, Verne. 1997. *Exploring Archives: An introduction to archival ideas and practice in South Africa*. Pretoria: National Archives of South Africa.
- Hatje, G. (ed.) 1963; 1971. *Encyclopaedia of modern architecture*. Norwich: Jarrold and Sons Limited.
- Herbert, G. 1975. *Martienssen & the international style: the modern movement in South African Architecture*. Cape Town: A. A. Balkema.
- Hildebrand, Grant. 1991. *The Wright Space: Pattern and Meaning in Frank Lloyd Wright's houses*. Seattle: University of Washington Press.
- Joyce, Peter. 1999. *A Concise Dictionary of South African Biography*. Cape Town: Francolin Publishers.
- Judin, Hilton, Vladislavic, Ivan. (eds.). 1998. *blank__architecture, apartheid and after*. Rotterdam: NAI.
- Khan, Hasan-Uddin. 2001. *International Style: Modernist atchitecture from 1925 to 1965*. London: Taschen.
- Kossick, S.G. 'Martienssen, Rex Distin' in HSRC. 1977. *Dictionary of South African Biography* Volume III: 584–585. Pretoria: Human Sciences Research Council.
- Laseau, Paul, Tice, James. 1992. *Frank Lloyd Wright: Between principle and form*. New York: Van Nostrand Reinhold.
- Le Corbusier. 1927; 1974. *Vers une architecture [Towards a New Architecture]*. Great Britain, London: Morrison and Gibb Ltd.
- Los, Sergio. 1993. *Carlo Scarpa*. Cologne: Benedict Taschen.
- Le Roux, S (ed.) and Botes, N. 1991. *Plekke en Geboue van Pretoria*. Volume Twee. Pretoria: Stadsraad van Pretoria.
- Le Roux, S (ed.) and Botes, N. 1993. *Plekke en Geboue van Pretoria*. Volume Drie. Pretoria: Stadsraad van Pretoria.
- Moll, J.C. 'Fischer, Abraham (Bram)' in HSRC. 1987. *Dictionary of South African Biography* Volume V: 263–264. Pretoria: Human Sciences Research Council.
- Norberg-Schulz, C. 2000. *Principles of Modern Architecture*. London: Andreas Papadakis Publisher.
- Pearse, G.E. 1933. *Eighteenth Century Architecture in South Africa*. Cape Town: A.A. Balkema.
- Radford, D. 'Pearse, Geoffrey Eastcott' in HSRC. 1981. *Dictionary of South African Biography* Volume IV: 453–454. Pretoria: Human Sciences Research Council.
- Roodt, L. 'Moerdijk (Moerdyk), Gerard Leendert Pieter' in HSRC. 1977. *Dictionary of South African Biography* Volume III: 622–624. Pretoria: Human Sciences Research Council.
- Schildt, G. 1998. *Alvar Aalto Masterworks*. Italy: Thames and Hudson.
- Smithson, Alison and Peter. 1965; 1981. *The Heroic Period of Modern Architecture*. Italy: Thames and Hudson.
- St. John Wilson, Colin. 2007. *The Other Tradition of Modern Architecture: the uncompleted project*. London: Black Dog Publishers.
- Trotter, 1899. *Old Colonial Houses of the Cape of Good Hope*. London: Bradbury Agnew, & Co. Ld., Printers
- Werth, A.J. 'Hendrikz, Willem de Sanderes' in HSRC. 1987. *Dictionary of South African Bi-*

- ography Volume V: 339–340. Pretoria: Human Sciences Research Council.
- Werth, A.J. 'Pierneef, Jacob Hendrik' in HSRC. 1981. *Dictionary of South African Biography* Volume IV: 458–460. Pretoria: Human Sciences Research Council.
- In-text unpublished thesis documents**
- Barker, Arthur. 2012. *Heterotrophic syntheses: mediation in the domestic architecture of Gabriel (Gawie) Fagan*. Unpublished PhD thesis, University of Pretoria, Pretoria.
- Herbert, G. 1969. *Martienssen and the International Style: a case study in the dissemination of the the modern movement in architecture*. Unpublished PhD thesis, University of South Africa (UNISA). Pretoria.
- Joubert, O. 1999. *A contemporary assessment of the genesis of the modern aesthetic – the impact of modern art on modern architecture*. Unpublished PhD thesis, University of Kwa-Zulu Natal, Durban.
- In-text: Other journals**
- Anon. 1935. 'University of the Witwatersrand, Eleventh Annual Exhibition and Prize Giving'. *SAAR*, September 1935:280–290.
- Anon. 1936. 'University of the Witwatersrand, Twelfth Annual Exhibition and Prize Giving'. *SAAR*, September 1936:286–290.
- Anon. 1938. 'Casa Bedo, Waverley, Johannesburg'. *SAAR*, 33, November 1936:426–433.
- Anon in Beck, H. (ed.). 1985. 'End Papers: Biographies'. *UIA*, 1985, Issue 8. *Sans* page number.
- Barker, Arthur. 2010. 'Heterotropic synthesis: mediation in the domestic architecture of Gabriël Fagan'. *SAJAH*, Volume 25, Number 1, 2010:14–33.
- Beck, Haig. (ed.). 1985. *UIA International Architect – Southern Africa*. Magazine Issue 8. London: International Architect.
- Biermann, Barrie. 1980. 'Architecture goes back to the land'. *Architecture SA*, Autumn 1980: 6–9.
- Blasi, I., Tostões, A. (eds.). 2010. 'Art and Architecture'. *Do.co.mo.mo*. Journal 42, Summer 2010.
- Buchanan, P. 2012. 'The Big Rethink: Place and Aliveness: Pattern, Play and the Planet'. *The Architectural Review*, Issue nr 1386, Volume CCXXII, August 2012:86–95.
- Casson, H. 1940. 'Pretoria the Mushroom Capital'. *Architectural Review*, 87(519):37–40.
- Casson, H. 1940. 'Modern Architecture in South Africa'. *Architectural Review*, August:40–44.
- Cooke, Bernard. 1942. 'A House in Morningside, Johannesburg'. *SAAR*, August 1942:224–226.
- Cooke, Bernard. 1988. 'Le Groupe Transvaal'. *Architecture SA*, January/February 1988: 17–19.
- Cooke, J. in Beck, Haig. (ed.). 1985. 'A Biographical History', *UIA International Architect – Southern Africa*. Magazine Issue 8, 1985: 58–61. London: International Architect.
- Cooke, J. 1993. '60 after zero – Modernism revisited: Shifts after the Thirties'. *Architecture SA*. July/August, 23–30.
- De Beer, I., Jacobs, H., Prinsloo, I., Van Wyk, L. (eds.). 2000. *Architecture 2000. A Review of South African Architecture*. Endorsed by the South African Institute of Architecture. Johannesburg: Picasso Headline.
- Du Toit, A. 1983. 'Norman Eaton – Architect'. *Architecture SA*, May/June 1983:48–49.
- Du Toit, A. 1989. 'Robert Schmickl I.A.L.I.A. Argitek'. *Architecture SA*, May/June 1989: 37–38.
- Fisher, R.C. 1991. 'The Genealogy of a plan: A tribute to Barrie Biermann'. *Architecture SA*, September/October, 35–37.
- Fisher, R.C. 1997. 'Norman Eaton – some influences on his insights'. *Suid-Afrikaanse tydskrif vir kultuureskiedenis/South African journal of cultural history*. Pretoria: SA Vereniging vir Kultuureskiedenis. Jg./Vol.11, Nr./No.2, November 1997:68–83.
- Fisher, R.C. 2000. 'A South African style-line', as published in *Architecture 2000, A Review of South African Architecture*. Endorsed by the South African Institute of Architecture.
- Fisher, R. C. *et al.* 2005. 'The modern movement architecture of four South African cities'. *Do.co.mo.mo*. Special Edition, July 2005: 36–67.
- Frasconi, Marco. 1984; 1996. 'The Tell-the-tale

- Detail', *The Building of Architecture*: 23–37; republished in Nesbitt, K. (ed.). *Theorizing a new agenda for architecture – an anthology of architectural theory 1965–1995*. New York: Princeton Architectural Press, 500–514.
- Frescura, Franco. 1983. 'Towards a new language of Southern African Architecture'. *Architecture SA*, May/June 1983:38–40.
- Holford, W. *SAAR*, Feb 1967: 17.
- Jordaan, G. 1989. 'Pretoria as 'Urbs Quadrata''. *Architecture SA* May/June 1989:26–29.
- Haasbroek, Hannes. 2011. 'Die Fischer-woning en swembad in Beaumontstraat 12, Johannesburg: simbool van rasseharmonie in apartheid-Suid-Afrika'. *Journal for Contemporary History*, Volume 36, Issue 1, 175–190.
- Hanson, Norman. 1939. 'An Architect's House'. *SAAR*, October 1939:432–441.
- Hanson, Norman. 193?. 'House in Brooklyn, Pretoria. a commentary by Norman Hanson'. *SAAR*, May 193?:141–149
- Howie, Duncan. (ed.). 1949. *SAAR*, Volume 35, February 1949.
- Jonas, Kurt. 1937. 'The genesis of a House'. *SAAR* February, 1937:100–115.
- Kotze, P., Munro, K. 2011. 'Tribute to Bernard Stanley Cooke – architect extraordinaire who left an indelible legacy for Wits'. *WITS REview* April 2011 Vol 16: 38–43. Johannesburg: University of the Witwatersrand.
- Meiring, A.L. 'Norman Eaton was the finest architect in the country'. *Pretoriana*, Dec 1966: 50–53.
- Spence, Betty. 1940. 'Native Architecture'. *South African Architectural Record*, November 1940: 387–391.
- Peters, W. 1987. 'The importance of the 30s in the Domestic Architecture of Hellmut Stauch'. *Architecture SA*, Jan/Feb:23–9.
- Preller, Alexis. 1966. 'In tribute to Norman Eaton'. *SABA*, no 2:10.
- Preller, Alexis. 1967. 'Extracts from funeral oration', *SAAR*. February 1967:15–16.
- Prinsloo, I. 1993. 'The sixties revisited'. *Architecture SA*, July/Aug:31–42.
- Walton, James. 1949. 'South African Peasant Architecture – Southern Sotho Folk Building'. *SAAR*, Volume 34, January 1949:3–12.

In-text Digital References

- www.artefacts.co.za
- Anon. *The Pretorian*, Jubilee Edition, 1910–1960 accessed from the UP digital repository at <http://repository.up.ac.za> ([Accessed 17-04-2012])
- Anon. http://www.soweto.co.za/html/p_scully.htm [Accessed 12-12-2012]
- Lynch, C.A. 2003. *Institutional repositories: essential infrastructure for scholarship in the digital age*. ARL, 226, 1–7. (<http://www.arl.org/newsltr/226/ir.html> [Accessed 18-01-2007])

6.2. Consulted references

Consulted References: Books

- Cohen, Jean-Louis. 2004. *Le Corbusier 1887 – 1965: The Lyricism of Architecture in the Machine Age*. London: Taschen.
- Davidson, B. 1959. *Old Africa Rediscovered*. London: Victor Gollancz Ltd
- Davidson, B. 1991. *Africa in history*. London: Phoenix.
- Denyer, S. 1978. *African Traditional Architecture*. London: Heinemann
- Elleh, Nnamdi. 1997. *African Architecture: evolution and transformation*. New York: Mcgraw Hill.
- Ford, Edward R. 2003. *The Details of Modern Architecture*. Volume 2: 1928–1988. MIT Press.
- Frampton, K. 2002. *Labour, Work and Architecture*. London: Phaidon Press.
- Frescura, F. 2001. *Rural Shelter in Southern Africa*. Johannesburg: Ravan Press (Pty) Ltd.
- Garlake, P.S. 1973. *Great Zimbabwe*. London: Thames and Hudson.
- Greig, D. 1971. *Standard Encyclopedia of South Africa 4*. Cape Town.
- Hays, Michael K. 2000. *Architecture Theory since 1968*. Columbia University: MIT Press.
- Huffman, T.N. 1996. *Snakes and Crocodiles, Power and Symbolism in Ancient Zimbabwe*. Johannesburg: Witwatersrand University Press.
- Loos, Adolf; Opel, Adolf (ed.). 1998. *Ornament and Crime: Selected Essays*. Ariadne Press (CA).

- Mallgrave, Harry Francis. 1996. *Gottfried Semper Architect of the Nineteenth Century*. New Haven: Yale University Press.
- Ndebele, N. 1991. *Rediscovery of the ordinary*. Johannesburg: COSAW
- Nesbitt, K. 1996. *Theorizing a new agenda for architecture: an anthology of architectural theory. 1965–1995*. Princeton Architectural Press. New York.
- Oliver, Paul. (ed.). 1975. *Shelter, Sign & Symbol*. London: Barrie & Jenkins.
- Oliver, R. 1991. *African experience*. London: Weidenfeld & Nicolson
- Ouzman, Sven. 2011. *Imprints: An Archaeology of Identity in Post-Apartheid Southern Africa*. ProQuest, UMI Dissertation Publishing.
- Phillipson, David. 1997. *The Monuments of Aksum*. Addis Ababa: Addis Ababa University Press.
- Prussin, L. 1995. *African Nomadic Architecture: space, place and gender*. Washington: Smithsonian.
- Rapoport, A. 1969. *House form and Culture*. Englewood-Cliffs (NJ): Prentice-Hall.
- Risselada, Max. (ed.). 1989. *Raumplan versus Plan Libre. Adolf Loos and Le Corbusier, 1919–1930*. New York: Rizzoli.
- Said, Edward. 1978. *Orientalism*. United States: Vintage Books.
- Semper, Gottfried. 1851; 1852; 1989. *Die vier Elemente der Baukunst, Wissenschaft, Industrie und Kunst*. Translated excerpts published as 'The Four Elements of Architecture and Other Writings' by Mallgrave, H.F., Wolfgang, H. Cambridge: Cambridge University Press.
- St. John Wilson, Colin. 2007. *The Other Tradition of Modern Architecture: the uncompleted project*. London: Black Dog Publishers.
- Vogt Adolf Max, translated by Donnell, R. 2000. *Le Corbusier, the Noble Savage: Toward an Archaeology of Modernism*. London: MIT Press.
- Eaton, N. 1964. 'The Architect today', paper read at an architectural congress of the Institute of South African Architects, Cape Town, May 1964. Published in *SAAR*, June 1946:52–57.
- Consulted references: Other journals**
- Anon. 'Tribute to Norman Eaton (Cape Provincial Institute of Architects)', *SAAR*, February 1967:18–19.
- Barac, M and Buckland, A. 2005. 'Architectural Great Norman Eaton', *Elle decoration*. no. 38, 2005, pages 25–26.
- Biermann, B. 1962. 'The Netherlands Bank, Durban designed by Norman Eaton – an Appreciation'. *South African Architectural Record*, February 1962:20–22.
- Frampton, K. 1990; 1996. 'Rappel AL'Ordre, The Case for the Tectonic', *Architectural Design* 60, no. 3–4:19–25; republished in Nesbitt, K. (ed.). *Theorizing a new agenda for architecture – an anthology of architectural theory 1965–1995*. New York: Princeton Architectural Press, 518–529.
- Guedes, Amancio. 1988. 'Le Corbusier and the Modern Movement in Johannesburg'. *Architecture SA*, January/February 1988: 9–15.
- Joubert, O. 1994. 'Afro-pean symbiosis'. *Africa Insight*. Vol 24, no.4, 1994:250–256.
- Louw, H. 2002. 'Architecture and Craft: a working relationship?' *Acta Varia* 2:4–23. University Free State: Xerox Printing Services.
- Mackenzie, C. 1993. 'Le Corbusier in the sun'. *Architectural Review*, Febr 1993:71–74.
- Martienssen, Rex. 1941. 'Constructivism and Architecture'. *SAAR*, July 1941:241–270.
- Muller, F.O. 1949. 'A Residence for the Architect at Sandringham, Johannesburg'. *SAAR*, Volume 37, April 1949:73–75.
- Rich, P. 1982. 'The Bantwane Settlement A, Kwarrielaagte'. *Architecture SA*, 1982 Nov/Dec.
- Spence, Betty. 1940. 'Native Architecture'. *South African Architectural Record*, November 1940:387–391.
- Pevsner, Nikolaus. 1953. 'Johannesburg – the development of a contemporary vernacular in the Transvaal'. *The Architectural Review*, Volume 113, Number 678, June 1953:360–382.
- Walton, James. 1949. 'South African Peasant
- Consulted References: Articles/Papers by Norman Eaton**
- Eaton, N. 'Comments on the planning of Church Square, Pretoria'. *SAAR*, March 1963:16.

Architecture – Southern Sotho Folk Building'.
SAAR, Volume 34, January 1949:3–12.
Wegelin, Hans. 1994. 'Architrix'. *Architecture SA*,
May – June:36–37.

Consulted Digital References

Adolf Loos papers, 1930–1933 available at the
Getty Library Digital Repository [http://library
.getty.edu/cgi-bin/](http://library.getty.edu/cgi-bin/).

Interviews

Chipkin, Clive (1929–). Author of *Johannesburg
Style: Architecture and Society 1880s–1960s*.
(Cape Town: David Phillip Publishers, 1993)
and *Johannesburg Transition. Architecture &
Society from 1950*. (Johannesburg: STE Pub-
lishers, 2008) June, 2010. Johannesburg.

Harrop-Allin, Clinton.¹ June, 2010, May 2011.
Pretoria.

¹ See Appendix B for an introduction.

APPENDICES



APPENDIX A

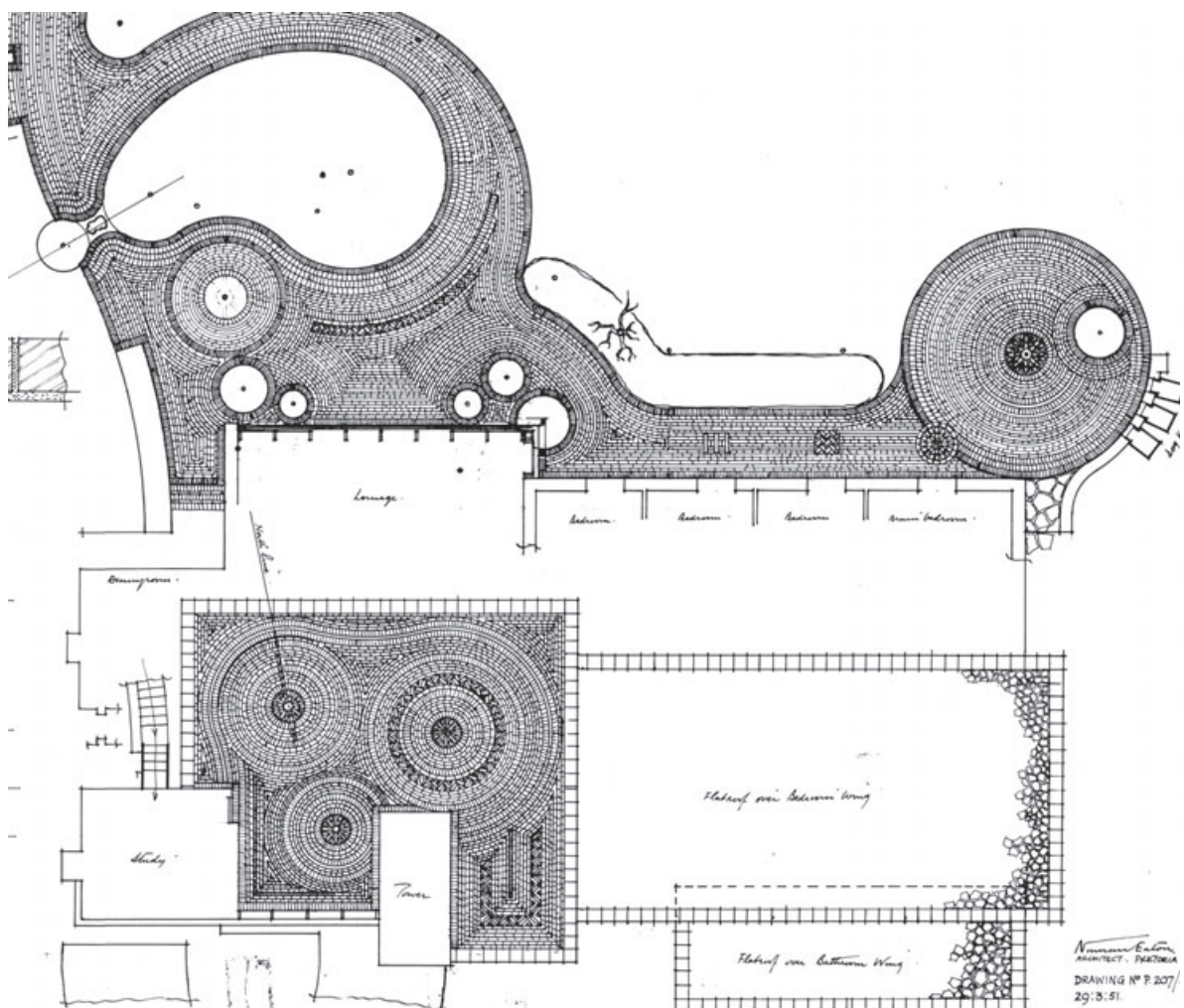
Timeline and list of projects

The following timeline deals primarily with the events forming the backdrop to Eaton's career and focuses on events, individuals, travels and buildings of significance, roughly up until 1966. Thereafter, the timeline highlights continuous references to Eaton, and traces the formation of his collection at the UP to date.

The list of buildings in the last column is based on the present information, at the time of this

study, in the Eaton Repository. The year in which planning of a project started is indicated. The sign '*' indicates whether the project was realized based on availability of information at the time. Projects appear in the chronological order as per dates on drawings Repository at the UP.

- Red indicates events in Eaton's life.
- Blue indicates buildings of significance that are referred to in the main body of text.



TIMELINE AND CHRONOLOGICAL LIST OF THE DESIGNS OF EATON

International event or building of significance Buildings or projects highlighted in blue were referenced in the text of the main document	South African event Red indicates events in Eaton's life Blue indicates buildings of significance that were referred to in the main body of text	Date	Project/Building by Norman Eaton The year in which planning of a project started was indicated. The sign * indicates whether the project was realized based on availability of information at the time. Projects appear in the exact chronological order as per dates on drawings archived at the University of Pretoria.
	Portions of the farm Elandspoort and Daspoort were declared the town Pretoria on 16 November 1855.	1855	
British architect, Herbert Baker was born.		1862	
American architect Frank Lloyd Wright was born in Wisconsin, USA.		1867	
Architect Adolf Loos was born in Brno, Moravia.		1870	
	Writer, scientist, poet and philosopher Eugène Marais was born in Pretoria.	1871	
	Afrikaans journalist and historian Gustav Preller was born.	1875	
Pablo Picasso was born.		1881	
	Paul Kruger became President of the South African Republic.	1883	
Ludwig Mies van der Rohe was born in Aachen, Germany.	Gold was discovered on the Witwatersrand and Johannesburg was born.	1886	
Prominent American architect Henry Hobson Richardson (b.1838) died.	Architect George Esslemont Gordon Leith was born in Knysna. Artist Jacobus Hendrik Pierneef was born in Pretoria.		
Swiss French architect and urbanist, Le Corbusier (Charles-Edouard Jeanneret), was born in Switzerland and Rudolph Michael Schindler was born in Austria.		1887	
	Cecil John Rhodes became Minister of the Cape Colony. Gerard Leendert Pieter Moerdijk (Moerdyk) was born in the Waterberge. Frans Oerder (1867–1944), the Dutch-born artist, emigrated to the then Transvaal Republic and was considered to be the first official artist to the <i>Boers</i> in the Anglo-Boer War.	1890	
Richard Josef Neutra was born in Austria.		1892	
House Winslow , River Forest, Illinois, USA, by Frank Lloyd Wright was completed.		1893	
Adler and Sullivan's Guaranty Building , Buffalo, USA was completed.		1895	
Finnish architect Hugo Alvar Hendrik Aalto was born in Kuortane, Finland.		1898	
	The Anglo-Boer War started.	1899	
Marcel Lajos Breuer was born in Hungary on 21 May.	The Anglo-Boer War ended with the Treaty of Vereeniging on 31 May 1902.	1902	
Arthur Heurtley House , Chicago suburb of Oak Park, Illinois, USA by Frank Lloyd Wright completed.	British architect Herbert Baker arrived in Johannesburg. Norman Musgrave Eaton was born in Pretoria on 11 October 1902.		
Robert Gustav Schmickl was born in Vienna, Austria.		1903	
Wilhelm Arnold Heinrich Pabst was born in Germany.	Rex Dustin Martienssen was born in Queenstown, South Africa. Aubrey Nunn was born.	1905	
Italian architect Carlo Scarpa was born in Venice, Italy.		1906	

TIMELINE AND CHRONOLOGICAL LIST OF THE DESIGNS OF EATON

International event or building of significance Buildings or projects highlighted in blue were referenced in the text of the main document	South African event Red indicates events in Eaton's life Blue indicates buildings of significance that were referred to in the main body of text	Date	Project/Building by Norman Eaton The year in which planning of a project started was indicated. The sign * indicates whether the project was realized based on availability of information at the time. Projects appear in the exact chronological order as per dates on drawings archived at the University of Pretoria.
Les Demoiselles d'Avignon' was produced by Pablo Picasso (1881–1973)		1907	
Oscar Niemeyer was born in Brazil. The AEG Turbine Factory, by Peter Behrens (1868-1940) was finished in Berlin, Germany. The Robie House, Oak Park, Illinois, USA, by Frank Lloyd Wright completed.		1909	
Hellmut Stauch was born in Germany.	The Union of South Africa was established and General Louis Botha became first Prime Minister. Architect John Fassler was born.	1910	
The Fagus Factory, by Walter Gropius and A. Meyer, in Alfeld-an-der-Leine, was completed. During this same year, House Taliesin I/II, Wisconsin by Frank Lloyd Wright would be completed, to which Eaton would be invited years later, on his visit to the Americas during 1945.	Artist and life-long friend to Eaton, Alexis Preller, a cousin of Gustav Preller, was born on 6 September in Pretoria. Gordon Leith awarded the first Herbert Baker-scholarship.	1911	
	The Union Buildings, Pretoria, were completed.	1913	
The assassination of Austrian Archduke, Franz Ferdinand and his wife, triggered the outbreak of the First World War.		1914	
Villa Schwob, or 'Turkish Villa', La Chaux-de-Fonds, France by Le Corbusier completed.		1916	
De Stijl [The Style], also known as Neoplasticism, was a Dutch artistic movement founded in 1917 in the Netherlands and was considered by the Smithsons as the start of the heroic period of the Modern Movement (Smithson, 1981).		1917	
The Tsarist aristocracy was ended after a series of revolutions in Russia, collectively the 'Russian Revolution'.			
The First World War ended, Czar Nicholas II and his family were executed by order of the new Russian regime. Walter Gropius (1883–1933) founded the Bauhaus in Weimar, Germany.	Norman Eaton's father passed away.	1918	
		1919	
Erich Mendelsohn's (1887–1953) Einstein Tower in Potsdam.	Prof. G. E. Pearse took the first South African Chair of Architecture at the University of the Witwatersrand. Eaton finished his schooling at the Diocesan College (Bishops) in Rondebosch.	1921	
	Eaton enrolled as a student under Prof. G. E. Pearse at the newly established School of Architecture at the University of the Witwatersrand (Harrop-Allin, 1975:19).	1922	
Adolf Hitler wrote <i>Mein Kampf</i> Le Corbusier's <i>Vers une architecture [Towards a New Architecture]</i> was published, and he finished Maison La Roche. Ludwig Mies van der Rohe's free-flowing 'pinwheel' plan for his country house project surfaced.	Eaton was articled to architect Gordon Leith, according to Harrop-Allin (1975:19).	1923	

TIMELINE AND CHRONOLOGICAL LIST OF THE DESIGNS OF EATON

International event or building of significance Buildings or projects highlighted in blue were referenced in the text of the main document	South African event Red indicates events in Eaton's life Blue indicates buildings of significance that were referred to in the main body of text	Date	Project/Building by Norman Eaton The year in which planning of a project started was indicated. The sign * indicates whether the project was realized based on availability of information at the time. Projects appear in the exact chronological order as per dates on drawings archived at the University of Pretoria.
<p>Gerrit Thomas Rietveld's house for the interior designer Truus Schröder-Schräder in Utrecht, the Netherlands, was finished.</p> <p>Hugo Häring's (1882–1958), farm complex at Garkau, Lübeck, was completed. Later (1962) found and measured by South African architecture student, Ivor Prinsloo.</p> <p>Louis Sullivan, mentor of Frank Lloyd Wright, died in poverty in Chicago.</p>	<p>Leith became Eaton's mentor when the young Eaton joined his office in 1924, according to Fisher (1997:70).</p>	1924	
<p>Le Corbusier completed the 'Pavilion de l'Esprit Nouveau' for the 'Exposition Internationale des Arts Decoratifs', Paris Start of the Weissenhofsiedlung, Stuttgart (1925–1927).</p>	<p>An article entitled the 'Modern Movement in Architecture' by Furrer was published in the SAAR (Dec 1925:87-89) – now the official journal of the SA Institute of Architects. Martienssen and fellow-student McIntosh took a study tour to Europe from 1925-26 (Harrop-Allin, 1975:17).</p>	1925	
<p>The Bauhaus Building in Dessau, Germany by Walter Gropius, was completed.</p>	<p>The office of Gordon Leith won the competition for the Pretoria Technical College with a Baker School-inspired design and Eaton was put in charge of the Pretoria branch.</p>	1926	
<p>Le Corbusier developed his 'Five Points' in Architecture.</p>			
<p>Mendelsohn's Schoken Store, Stuttgart which Martienssen had 'raved about' upon visiting it in 1930 (Chipkin, 1993: 135). Also completed the Petersdorff Store, Breslau. Le Corbusier and Jeanneret's, Villa de Monzie at Garches, France.</p> <p>Vers une Architecture [Towards a New Architecture] (1923) was translated into English.</p> <p>Weissenhofsiedlung Estate for the <i>Deutscher Werkbund</i> exhibition, Stuttgart was completed under directorship of Mies van Der Rohe.</p>	<p>A letter from Le Corbusier was published in SAAR 20 (11):381-3.</p>	1927	<p>Proposed alterations to premises for Messrs Glens (PTY) Ltd., in Church Street, Pretoria: The initial scheme was started in the Johannesburg branch of Gordon Leith's offices and was dated 14 February 1923. Eaton would naturally then have been responsible for the alterations to the music shop in Church Street and indeed: these drawings were amongst the ones in his archival collection, even if executed under Leith's name. On the drawing dated '2.8.1927', the address appeared as: Gresham Buildings, Pretoria – which would also be the later address for the offices of Eaton. He would occupy 52 Gresham Buildings, Andries Street initially, then moved to 38 Gresham Buildings for his own offices until WWII when he moved to Velra House, Bureau Lane.</p>
<p>CIAM, the <i>Congrès internationaux d'architecture moderne</i> [International Congresses of Modern Architecture] was founded in La Sarraz, Switzerland.</p>	<p>Eaton qualified as an architect, graduating under Pearse (Harrop-Allin, 1987:229). Gordon McIntosh (1904–1983), who later designed the first 'International Style' building in South Africa (Munro House), qualified in the same year. During this year, Eaton measured and redrew House Stellenberg, for the Pearse book on Cape Dutch architecture, published in 1933.</p>	1928	<p>Eaton was part of a select group of students at Wits who drew eighteenth century Cape Dutch architecture and furniture for Professor Geoffrey Pearse (Harrop-Allin, 1975:22). Pearse had taken them on a field trip to the Cape during 1928. Their documentation was published in his book <i>Eighteenth Century Architecture in South Africa</i> (Cape Town: Balkema, 1933).</p>
<p>Mies van der Rohe finished the 'Barcelona Pavilion' for the International Exhibition, Barcelona, Spain.</p>	<p>Eaton won the Herbert Baker Scholarship competition which enabled him to study in Europe. During the same year, the Technical College, Pretoria, was finished: a neo-classical, Baker school architecture.</p>	1929	
<p>29 October: Wall Street crashed.</p>			

TIMELINE AND CHRONOLOGICAL LIST OF THE DESIGNS OF EATON

International event or building of significance Buildings or projects highlighted in blue were referenced in the text of the main document	South African event Red indicates events in Eaton's life Blue indicates buildings of significance that were referred to in the main body of text	Date	Project/Building by Norman Eaton The year in which planning of a project started was indicated. The sign * indicates whether the project was realized based on availability of information at the time. Projects appear in the exact chronological order as per dates on drawings archived at the University of Pretoria.
<p>Mies van der Rohe's Tugendhat house, Brno, was completed and considered to be the 'most radical and complete interpretation of the modern dwelling so far' (Norberg-Schulz, 2000:55). Le Corbusier and Jeanerret's proposal for Maison Errazurias, Chile, with a pitched roof was constructed of random rubble stone and an exposed timber roof.</p>	<p>Eaton's studies in Rome commenced in 1930 and were completed in 1932 (Greig, 1971:190). During the subsequent three years, he travelled to Italy, Greece, Turkey, England, Holland and central Europe (Harrop-Allin, 1975:24). Martiessen graduated with a Diploma in Architecture in April 1930. During the same year, Martiessen travelled to Europe along with fellow-student Norman Hanson. Amongst others, they visited the Weissenhofsiedlung Development, Stuttgart. (http://www.artefacts.co.za/main/Buildings/archframes.php?archid=1053 [Accessed 29-10-2012]).</p>	1930	<p>The year allocated to the design for the 'Laurels' Cottage for Mr Price, Brooklyn, Pretoria'. According to the UP records, the date was 1930. If this was indeed correct, this house would have been his first commission. However, there was no date on the drawings in the repository to confirm the assumption, this house might therefore date from 1932 or the following few years when Eaton established his practice in Pretoria.</p>
<p>World depression set in. Le Corbusier and Pierre Jeanneret's Villa Savoye (1928–1931), in Poissy-sur-Seine, France was completed. The villa was the culmination of a zealous codification of aesthetic canons, belonging to Le Corbusier's purist phase (1917–1930). After its completion, Le Corbusier would adopt a more regionally and climatically responsive architecture, as exemplified in the house for Madame de Mandrot (1931), Toulon, France where he employed rubble stone and timber framed openings (Joubert, from De Beer <i>et al</i>, 2000:118; Barker, 2012:82).</p>	<p>Eaton documented ruins and details of buildings in Neptune, Palerma, Pompei in Italy (Eaton Diaries, 1931). Aubrey Nunn returned to South Africa in 1931, settling in Pretoria where he opened practice. According to Nation (<i>Lantern</i>, Feb 1989:29), Nunn offered Hellmut Stauch, newly arrived in Cape Town from Germany, employment which Stauch took up in March 1935. Martiessen joined the staff at the University of the Witwatersrand Department of Architecture (Kossick, 1977:584).</p>	1931	
<p>English physicists John Cockroft and Ernest Walton split the atom.</p>	<p>Eaton visited Egypt en route to South Africa (1975:24). According to Harrop-Allin, Eaton had established private practice in Pretoria in 1933 (1975:24). In fact, this was confirmed by Eaton himself in his obituary to Leith (1965:12) and the biographical notes he had compiled prior to his death (<i>Pretoriana</i>, Dec 1966). However, work in his own name date from '7.10.32' (date as on the drawing) for the alterations at Barclays Bank and '28.10.32' for Farmstead Hill, therefore he must have started out on his own slightly earlier. The above-mentioned drawings were signed at 52 Gresham Buildings, Andries Street. He later used the address 38 Gresham Buildings.</p>	1932	<p>Farmstead for Mr Hill, near Lunsklip, Transvaal Alterations and additions to the Barclays Bank, East End Branch*</p>
<p>The exhibition entitled 'Modern Architecture: International Exhibition' was hosted at MoMA, New York under directorship of Alfred Barr The International Style: Architecture Since 1922 (New York: Norton & Co) by Henry-Russell Hitchcock and Philip Johnson was published, capitalizing the term 'International Style'.</p>	<p>South Africa adopted the standard brick size in line with Great Britain (SAAR, May 1932:134). House Munro, Brooklyn, Pretoria, by Gordon McIntosh was completed and became the first published local Modern building, appearing in the June 1932 issue of SAAR (158-9).</p>		

TIMELINE AND CHRONOLOGICAL LIST OF THE DESIGNS OF EATON

<p>International event or building of significance Buildings or projects highlighted in blue were referenced in the text of the main document</p>	<p>South African event Red indicates events in Eaton's life Blue indicates buildings of significance that were referred to in the main body of text</p>	<p>Date</p>	<p>Project/Building by Norman Eaton The year in which planning of a project started was indicated. The sign * indicates whether the project was realized based on availability of information at the time. Projects appear in the exact chronological order as per dates on drawings archived at the University of Pretoria.</p>
<p>Adolf Hitler became Chancellor of Germany. Adolf Loos died penniless in Kalksburg. The <i>Bauhaus</i> was closed, ending the heroic period of the Modern Movement internationally (Smithson, 1981).</p>	<p>Eaton set up his own practice according to his own biographical note (see entry 1932). The 'zero hour manifesto' was published on 1 April by the so-called 'Transvaal Group' and Professor Pearse's book <i>Eighteenth Century Architecture in South Africa</i> (Cape Town: Balkema) was published.</p>	<p>1933</p>	<p>Cottage Collender, Brooklyn, Pretoria Cottage Moggeridge, Brooklyn, Pretoria Cottage Boyes (initial design), Brooklyn, Pretoria Cottage Smook, Sunnyside, Pretoria Tielman Roos Memorial tablet Various furniture designs for James Downie from 1933-1936</p>
<p>Albert Speer was appointed as State architect by Hitler.</p>	<p>House Stern, Houghton, Johannesburg by Martienssen, Fassler & Cooke, refer to 'The genesis of a house' by Kurt Jonas, as published in the <i>SAAR</i>, 1934:100-114. Douglas Cowin won the <i>Rand Daily Mail Ideal Homes Competition</i> with an 'eclectic piece awkwardly [combining] elements of Loos and Le Corbusier' (Barker, 2012:94).</p>	<p>1934</p>	<p>House von Sonn, Pretoria House Boyes, Brooklyn, Pretoria* House Kleyn, Waterkloof, Pretoria House Turvey, Modderfontein Housing prototype, Nigel, Transvaal House Gascoyne, Muckleneuk, Pretoria House Nicolson, Brooklyn, Pretoria* Blocks of Flats (two separate), Arcadia, Pretoria House Viljoen, Muckleneuk, Pretoria* Chair and table for the SA Party to present to General J.C. Smuts</p>
<p>Le Corbusier's Mathes House, Chwerente-Maritime, La Pamyre, Les Mathes, France was completed and would be published in South Africa in 1938.</p>	<p>Merensky Library, Pretoria, University Campus, by Gerard Moerdyk.</p> <p>City Hall, Bloemfontein, Orange Free State, by Leith & Partners. Alexis Preller's first one-man exhibition in Pretoria. Hellmut Stauch arrived in South Africa and joined forces with Nunn.</p>	<p>1935</p>	<p>Houses for R. Tosi, and alteration to existing house, Westend, Pretoria* English Medium Junior School*, Brakpan House Barkham, Muckleneuk, Pretoria House Frommurze (Mackenzie), Brooklyn, Pretoria* House Rademeyer, Brooklyn, Pretoria Hostels for English Medium School, Pietersburg House Cordélie, Muckleneuk, Pretoria* House Borckenhagen, Melrose Estate, Johannesburg* Children's Health Resort, Hartebeespoort Dam*</p>

TIMELINE AND CHRONOLOGICAL LIST OF THE DESIGNS OF EATON

International event or building of significance Buildings or projects highlighted in blue were referenced in the text of the main document	South African event Red indicates events in Eaton's life Blue indicates buildings of significance that were referred to in the main body of text	Date	Project/Building by Norman Eaton The year in which planning of a project started was indicated. The sign * indicates whether the project was realized based on availability of information at the time. Projects appear in the exact chronological order as per dates on drawings archived at the University of Pretoria.
Giuseppe Terragni finished the 'Casa del Fascio', Como, Italy. Josef von Sternberg House, Los Angeles, California, by Richard Neutra.	<p>The 'British Empire Exhibition', mid-September 1936 to mid-January 1937, Johannesburg (Chipkin, 1993:105–109)</p> <p>Eaton befriended Viennese born architect-engineer Robert Schmickl and later employed him as his backroom assistant during the war. Together they made over-fired and misformed bricks fashionable for financially strapped home-builders (Fisher, 1997:79).</p> <p>Casa Bedo (1936–1937), Johannesburg, by Douglas Cowin tempered the orthodox aesthetic of the Transvaal Group (Barker, 2012:87).</p> <hr/> <p>Iscor began producing steel roof sheets and standardized steel windows on a 3'4" module (Barker, 2012:104).</p> <hr/> <p>Eugène Marais tragically took his own life.</p>	1936	<p>Conversion to House Te Water, Sunnyside, Pretoria</p> <p>Bungalow Partridge, Wonderboom Poort</p> <p>Swimming Bath Booths Girl's High School, Pretoria</p> <p>House Smit, Muckleneuk, Pretoria*</p> <p>Afrikaans Medium School*, Brakpan</p> <p>House Theron (initial, unbuilt), Brooklyn, Pretoria</p> <p>Additions to House Kling, Townlands, Quaggaspoort</p>
Talesin West, near Scottsdale, Arizona, by Wright.	<p>Exhibition Eaton participated in: as Eaton had included House Rawlins (1937) in the redrawn versions of the original sketch plans, the assumption was made by the researcher that Eaton did not participate in the British Empire Exhibition, but perhaps rather the annual School of Architecture Exhibition held at Wits, where work of previous students were included each year. Typical of these exhibitions and of the drawings Eaton had reworked, was <i>charette</i>-like font and crisp black lines.</p> <p>Gordon McIntosh's first International Style high rise, Whitecrook, Arcadia, Pretoria, was constructed (later demolished) (Herbert, 1975:184).</p> <hr/> <p>Argus Ideal Homes Competition was launched in an attempt to popularise the International Style Home in South Africa (Barker, 2012:90).</p>	1937	<p>House Theron, Brooklyn, Pretoria</p> <p>House Rawlins, Brooklyn, Pretoria</p> <p>Additions to House Curlewis, Waterkloof, Pretoria*</p> <p>House Cooper, near Rosslyn, Pretoria</p> <p>Alterations to House Price, Sherborne Road, Johannesburg</p> <p>New Studios for the SABC</p> <p>Bus shed and boys' rooms, Gezina, Pretoria</p> <p>House and Studio Van Wouw, Brooklyn, Pretoria*</p>
Germany and Russia invaded Poland, World War II started.	<p>Le Corbusier's Mathes House (1936) was published in the March issue of the SAAR (1938:85), influencing Stauch greatly (Barker, 2012:80).</p>	1938	<p>Lockwood Hall Golf Club*, Pretoria</p> <p>New Garage and shop Ter Wal, Capital Park, Pretoria</p> <p>House Tosi, Westend</p> <p>Arrival Place, gatehouse and Native Baths, Warmbad</p> <p>House Bram Fischer, Oaklands, Johannesburg*</p> <p>Abattoir, Kempton Park</p> <p>House Malherbe, Waterkloof, Pretoria</p> <p>House De Loor, Muckleneuk Ridge, Pretoria*</p> <p>House Lorne, Wierda Bridge, Pretoria</p> <p>Alterations to House Cullinan, Olifantsfontein</p>
<p>'Building the World of Tomorrow' as theme for the New York World Fair.</p> <p>Villa Mairea, Noormarkku, Finland by Alvar Aalto was completed.</p>	<p>Eaton in partnership with Alan Fair (dissolved in 1944) and it must have been around this time that Eaton moved to premises in Velra House, Bureau Lane where Schmickl would also set up offices, and so would Hellmut Stauch (Walters in Fisher <i>et al.</i>, 1998:177).</p> <p>Norman Hanson's own house, Johannesburg, completed.</p>	1939	<p>House Hamilton, Muckleneuk, Pretoria*</p> <p>Motor Tyre Works, Pretoria</p> <p>House Lodder, Brooklyn, Pretoria*</p> <p>House Cochrane, Johannesburg</p> <p>House Anderssen, Pretoria North*</p> <p>Giotto's Hill, for Walter Battiss, Pretoria*</p> <p>Assisted with House Elangeni in Brummeria for his artist friend Pierneef*</p> <p>House Bosman, Hyde Park, Johannesburg*</p>

TIMELINE AND CHRONOLOGICAL LIST OF THE DESIGNS OF EATON

International event or building of significance Buildings or projects highlighted in blue were referenced in the text of the main document	South African event Red indicates events in Eaton's life Blue indicates buildings of significance that were referred to in the main body of text	Date	Project/Building by Norman Eaton The year in which planning of a project started was indicated. The sign * indicates whether the project was realized based on availability of information at the time. Projects appear in the exact chronological order as per dates on drawings archived at the University of Pretoria.
Lloyd Lewis House, by Frank Lloyd Wright, Libertyville, Illinois, USA.	Martienssen's own house, Greenside Johannesburg, was completed: an interpretation of the <i>esprit nouveau</i> that became the prescribed Johannesburg post-war vocabulary (Chipkin, 2008:95).	1940	House van der Merwe, Derde Poort, Magaliesburg* House Eybers, Menlo Park, Pretoria House Neethling, Muckleneuk, Pretoria* Cottage Teichman, Waterkloof, Pretoria House Boshoff, Muckleneuk, Pretoria Memorial stone for the Baptist Memorial Church, Halfield Children's Art Centre, Pretoria Land Bank, Ermelo*
	Eaton travelled to Malawi, Lake Nyara during September 1941. Building controls were gazetted in July 1941, remaining in force until 1946. Restrictions were placed on skilled labour, and materials such as steel, electrical conduit and corrugated iron (Walters in Fisher <i>et al.</i> , 1998:177). Erich Mendelsohn visited Cape Town for one day <i>en route</i> to the USA, humorously told by Gilbert Herbert in <i>Architecture SA</i> (1987:22–23).	1941	Homestead Warren, at the farm Timaloo, near Pietpotgietersrust* House Franz van der Merwe, Lawley Street, Waterkloof, Pretoria House B.A. Key, Bryanston, Johannesburg (exact copy of House van der Merwe) House Harold Barns, Waterkloof, Pretoria (exact copy of Houses van der Merwe and Key) Rengaw Shop and Offices, Pretoria Land Bank, Pietermaritzburg* Land Bank, Potchefstroom*
	Rex Martienssen died in a car accident. A letter by Roy Kantorowich was published in the SAAR, which attacked the urban ideas of both Le Corbusier and Wright, accusing them of authoritarianism and even Fascism (Cooke in Fisher <i>et al.</i> , 1998:232). Eaton turned 40 , the age at which most architects supposedly produce their mature work.	1942	Homestead David Mostert, farm Vlakfontein, near Heidelberg Homestead Jarvie, northern Transvaal (exact copy of Homestead Warren) Alterations and additions to Zeerust High School, Zeerust Hoërskool Pretoria Noord, Pretoria Noord*
'Brazil Builds 1652–1942', staged at the Museum of Modern Art (MoMA) – portraying the Ministry of Education and Health, Rio de Janeiro (1936–1943) , by amongst others Oscar Niemeyer with a garden by Burle Marx.	Department of Architecture and Quantity Surveying formally founded in the Faculty of Science, University of Pretoria. Prof AL (At) Meiring, a practicing architect, became first fulltime professor and Head of the Department. (http://www.artefacts.co.za/main/Buildings/articles.php?artid=388 [Accessed: 15/01/2013]).	1943	Farmstead Buys, Vereeniging House Drakensberg, Pretoria House Truter-Boshoff, Johannesburg* Cottage Jacobsz, Hatfield, Pretoria* Alterations to House Grant-Mackenzie, Waterkloof, Pretoria* House Tindall, Illovo, Johannesburg
The catalogue of the exhibition titled ' Brazil Builds: Architecture New and Old 1652–1942 ' by Philip L. Goodwin was published by MoMA.	Eaton taught design at the Pretoria School for a year (Harrop-Allin, 1975:57). In an interview with Clive Chipkin, Fagan maintained that Eaton had been a studio master to him for a year (Chipkin, 2008:378). Fagan only started his studies at the Pretoria School four years after its establishment, which means that this date is contested: In a correspondence with Harrop-Allin, the first Head of the School, Prof Meiring, indicated that Eaton was only involved for one year, continuing thereafter to act as external examiner (Harrop-Allin, 1975:57) During this year, Eaton travelled to Eastern Africa: his travels take him by ship along the east coast of Africa to Kenya and he travels inland to Kampala, Uganda.		
<i>The Fountainhead</i> , by Ayn Rand was published.	Gustav Preller passed away.		

TIMELINE AND CHRONOLOGICAL LIST OF THE DESIGNS OF EATON

International event or building of significance Buildings or projects highlighted in blue were referenced in the text of the main document	South African event Red indicates events in Eaton's life Blue indicates buildings of significance that were referred to in the main body of text	Date	Project/Building by Norman Eaton The year in which planning of a project started was indicated. The sign * indicates whether the project was realized based on availability of information at the time. Projects appear in the exact chronological order as per dates on drawings archived at the University of Pretoria.
<i>Architectural Review</i> Special issue on South Africa, <i>Architectural Review</i> , October 1944.	Eaton was approached by the then Minister of Transport, the Hon. Mr C. Sturrock, to design the new Ministry of Transport Building , Pretoria and travelled to Cape Town in February to receive the commission. End of the Eaton & Fair Partnership and two new firms were established: Norman Eaton Architect , and Norman Eaton and Partners . Eaton travelled to Eastern Africa during December 1944.	1944	Farm House Eaton, Garstfontein, Pretoria District Nurses Homes for the TPA, Meerhof* 'Ygdrasil', studio for Alexis Preller* African Homes Trust, Pretoria Land Bank Building, Kroonstad* Design for the Ministry of Transport Building, Pretoria, commenced
The Second World War ended.	A study tour for Eaton was arranged to America, Argentine and Brazil . He left in July 1945 and returned via east Africa in December. His travels included the following cities and places, where he visited many prominent buildings and made detailed notes accordingly: Buenos Aires, Rio de Janeiro, Trinidad, Cuba, Miami, Washington, Los Angeles, San Francisco, Chicago, New York, Boston, Philadelphia, Washington, Baltimore, Bermuda, London, Cairo, Khartoum, Kwasumi, Kitale, Deckham, Mozambique, Durban. Amongst others, he had met Oscar Niemeyer on the 28/8/1945 . In North America, he visited Richard Neutra's offices in Los Angeles. He met Frank Lloyd Wright on the 13/10/1945 at Taliesin where he was a guest. The Wrights had invited him to supper and showed him over the house. The following day he spent with 'Frank' in Chicago. On the 15/10/1945 he visited Mies van Der Rohe's office and also met Mies who saw his sketch design for the new Ministry.	1945	House Connell O'C Maggs, Naboomspruit* New Farm House for F. Kuisis, Hartebeespoort* (no drawings in the Eaton Repository, but a detailed specification list)
Sir Herbert Baker passed away.	Drawings for the Netherlands Bank, Pretoria were signed ' Meiring & Eaton Architects ' after Eaton partnered with Prof. A.L. Meiring to commence the design. Building Controls were lifted in July.	1946	Netherlands Bank Building, Pretoria* completed 1955 Typical Pretoria block re-planned South African Mutual Life Assurance building, Pretoria New Bank and Office Building for Barclays Bank, Pretoria
Kaufman Desert House, by Richard Neutra, in Palm Springs, California published SAAR, June 1949:90-95.	Drawings for the Netherlands Bank building from this year, were signed ' Meiring, Eaton and Louw Architects '.	1947	Alliance Building Society new building, Kroonstad New Bank and Offices for Barclays Bank, Pretoria
Colin Rowe's essay on 'The Mathematics of the Ideal Villa, Palladio and Le Corbusier compared', first published March 1947.	The destruction of the Le Corbusian regime was almost complete in the 'Art of Architecture' Exhibition where Vitruvian ideals were hailed (Cooke in Fisher <i>et al</i> , 1998:232).		
The CIAM conference of 1947 shifted its attention from earlier abstract functionality and its idealism towards the need to create an environment that could meet the material and emotional needs of society (De Beer <i>et al</i> , 2000: 96).	Patidar Mansions, Johannesburg, by Wilhelm Pabst, completed.		

TIMELINE AND CHRONOLOGICAL LIST OF THE DESIGNS OF EATON

International event or building of significance Buildings or projects highlighted in blue were referenced in the text of the main document	South African event Red indicates events in Eaton's life Blue indicates buildings of significance that were referred to in the main body of text	Date	Project/Building by Norman Eaton The year in which planning of a project started was indicated. The sign * indicates whether the project was realized based on availability of information at the time. Projects appear in the exact chronological order as per dates on drawings archived at the University of Pretoria.
Alison and Peter Smithson won the Hunstanton School Competition; <i>Architectural Principles in the Age of Humanism</i> by Wittkower was published.	The Voortrekker Monument was inaugurated. Eaton travelled to Nairobi, Kenya and did beautiful drawings of doors, pots and a lyre.	1949	Alterations to Cottage van der Byl, Irene, Pretoria House Anderssen, the Willows, Pretoria* Cottage on Berea Street, Muckleneuk, Pretoria* Additions to farmstead for the Kearneys, Concordia
	The Meat Board building, Pretoria, by Hellmut Stauch, built in the modern idiom of Brazil. Eaton travelled to Witu, Gedi, Malundi, Mombasa, Lamu in Kenya and Entebbe in Uganda.	1950	Greenwood Village, the Willows, Pretoria* The Little Theatre, Pretoria* New Shop Hubsch, Pretoria
		1951	House Willem de Sanderes Hendrikz, on the farm Swalkerskraal, Plettenbergbaai Landscaping, Bowls Shelter, Squash Courts and Swimming Bath , Golf Club, Pretoria*
	Eaton entered into partnership with Tobie J. Louw (www.artefacts.co.za), but the first drawings in the archive indicate that the partnership possibly only started in 1957, or was an extension of the 1947 association between Meiring, Eaton and Louw (In 1967, the firm was called Louw, Marais, Marquart and Kuhn, which remained until 1980 when the name was changed to Tectura Architects , still existing today. According to the CV of the firm, Louw had joined Eaton in partnership during 1942, but no such evidence exists in the archive of Eaton's work). Eaton travelled to Nairobi, Kenya and drew the oldest two-storey Indian house in that city. Pius Pahl (1909–2003) arrived in South Africa.	1952	Vineyard terraces on Eaton's farm on portion of the farm, Garstfontein, east of Pretoria House Axelson, Pretoria Sanlam Building, Krugersdorp* Alterations and Additions to existing De Villiers Building, Pretoria Restoration of the Reiniet House, Graaff-Reinet, Karoo*
Team 10 was created at the CIAM IX Congress , including amongst others, the Smithsons. Team 10 created a schism within CIAM by challenging its doctrinaire approach to urbanism.	Eaton travelled to Dar-es-Salaam and islands to its south during December 1953.	1953	House Du Preez, Hurlingham, Johannesburg* Braaivleisplace (sic) for House Ross Glen, Waterkloofrif, Pretoria New Entrance to the Golf Club, Pretoria
		1954	Cottage and flats Borckenhagen, Potchefstroom Alterations to House van Schaik, Waterkloof, Pretoria House Holsboer, Waterkloof, Pretoria*
Carlo Scarpa's <i>Museo di Castelvecchio</i> , Verona, Italy (1956–1964).	Martienssen's <i>The idea of space in Greek architecture with special reference to the Doric temple and its setting</i> , was published (Johannesburg: WUP).	1956	Wachthuis, Pretoria* Garden enclosure for Mr Price, Waterkloof, Pretoria Rondavel addition to House van Wouw*

TIMELINE AND CHRONOLOGICAL LIST OF THE DESIGNS OF EATON

International event or building of significance Buildings or projects highlighted in blue were referenced in the text of the main document	South African event Red indicates events in Eaton's life Blue indicates buildings of significance that were referred to in the main body of text	Date	Project/Building by Norman Eaton The year in which planning of a project started was indicated. The sign * indicates whether the project was realized based on availability of information at the time. Projects appear in the exact chronological order as per dates on drawings archived at the University of Pretoria.
			Furniture for the SA Railways and Airways Tourist Bureau, Pretoria Alterations and furniture for the SA Wolraad, Merino House, Pretoria
Russia launched 'Sputnik I', the world's first unmanned orbiting spacecraft.	Artist Pierneef passed away on 4 October.	1957	House Heystek, Waterkloof, Pretoria Fireplace for House Bennet, Arcadia, Pretoria Shops Arcade and Offices for Arcade Properties, Pretoria Polley's Arcade, Wachthuwas, Pretoria*
	Dr. H.F. Verwoerd became Prime Minister. Gerard Moerdyk passed away. Richard Neutra visited South Africa.	1958	House Boorsma, Potchefstroom
The CIAM was disbanded. Frank Lloyd Wright passed away.	John Moffat Building, Wits Campus, by Fassler was completed with Perret influences.	1959	Alterations and additions to House Peart, Waterkloof, Pretoria Replica (with small modifications) of House Holsboer, Dunkeld, Johannesburg House for Australian High Commwassioneer, Waterkloof, Pretoria Alterations to Koedoe Building, Pretoria Residential Hotel for Chasomari, Pretoria
Major Exhibition, 'Pablo Picasso' at the Tate Gallery, London.	Eaton was awarded the Medal of Honour for Architecture by the SA Akademie vir Wetenskap en Kuns. Recent graduate from Massachusetts Institute of Technology and Yale, Julian Beinart (dates unknown) and Peter Eliastam (dates unknown) taught at the Department of Architecture at the University of Witwatersrand, giving new direction to architectural teaching and philosophy (Prinsloo, 1993:33). The journal <i>Uppercase</i> (by ex-Martienssen graduate, Theo Crosby) dedicated its third issue to the work done by the Smithsons (<i>ibid.</i> : 34).	1960	Additions to House Glen, Waterkloof, Pretoria <i>Cul-de-Sac</i> , Muckleneuk, Pretoria* Dombeya, house for Preller, Hartbeesfontein circa 1960 Drinking Fountain, Boy's High, Pretoria* Netherlands Bank (1960-1965), Durban*
John F. Kennedy President of the USA.	Anti-pass law demonstrations at Sharpeville and the ANC and PAC were banned.		
First person in space, Yuri Gagarin. Berlin Wall was built	South Africa became a Republic outside the Commonwealth. Albert Luthuli received Nobel Prize. Groups Areas act was passed. Richard Neutra visited South Africa a second time.	1961	House and Studio Esias Bosch, White River* House Moolman, Waterkloof Ridge* St. Paul's Anglican Church, Hamilton Avenue, Craighall Park, Johannesburg*
<i>Fondazione Querini Stampalia</i> , Venice, 1961-1963 by Carlo Scarpa . First TV satellite transmission.	Faculty of Geology and Mining Building, Wits Campus, Johannesburg by Hanson & Tomkin, merger between the Modern Movement and influences from Auguste Perret . Transvaal Provincial Administration Building, Pretoria , by Meiring & Naude with Moerdyk & Watson, Brazil influences . September exhibition and Manifesto by Witwatersrand students, calling for an architecture that could represent societal reform, a new realism, reject formalism and challenge neoclassicism (Prinsloo, 1993:35-36).	1962	House Scully, Waterkloofrif, Pretoria* House van Wyk*, Riversdal Alterations to the Technical College Library

TIMELINE AND CHRONOLOGICAL LIST OF THE DESIGNS OF EATON

International event or building of significance Buildings or projects highlighted in blue were referenced in the text of the main document	South African event Red indicates events in Eaton's life Blue indicates buildings of significance that were referred to in the main body of text	Date	Project/Building by Norman Eaton The year in which planning of a project started was indicated. The sign * indicates whether the project was realized based on availability of information at the time. Projects appear in the exact chronological order as per dates on drawings archived at the University of Pretoria.
	Eaton travelled to Japan and India. Eaton was to design a house for Dr Koto Matsudaira, on a site at Kamakura in Japan, and had visited the site on this particular trip (Eaton Diary, 1962). He seems to have met up with Dr Matsudaira and his family in India before travelling with them to Japan. Cities and places visited include: Bombay, Delhi, Taj Mahal, Chandigarh, Lahore, Agra, Jaipur, Kamakura, Takamatsu, Kyoto, Hong Kong, Bangkok, London.		
John F. Kennedy assassinated.	Dutch Reformed Church, Welkom, Free State by Roelof Uytendogaardt , referred to Louis Kahn's First Unitarian Church and School, Rochester (1959–1969). Art Museum, Arcadia, Pretoria, by Burg Lodge & Burg with Gordon McIntosh completed in the International Style with Miesian references.	1963	Alterations to House Murray, later Loubser, Muckleneuk, Pretoria* Residence Camerer, Johannesburg Alterations to Pretoria Mineral Industries, Pretoria
House Vanna Venturi, Chestnut Hill, Pennsylvania, by Robert Venturi and Rauch, was completed.	Wilhelm Pabst passed away. Eaton travelled to Kenya again.	1964	House van den Berg, Lynwood Glen, Pretoria* Farmstead Taute, Oudshoorn Proposal for new Administration Buildings for the University of the Witwatersrand, Johannesburg
Deaths of Le Corbusier, TS Eliot, Winston Churchill and Bob Dylan.	Architect Gordon Leith passed away Trial of Bram Fischer and thirteen others for furthering the aims of the Communist Party.	1965	Entry for the <i>Afrikaanse Taalmonument</i> "prysvraag"
London declared the 'swinging City of the decade', centre of Beatles culture. <i>Complexity and Contradiction in Architecture</i> , by Robert Venturi, was published.	SA Prime Minister Dr. H.F. Verwoerd was assassinated and was succeeded by John Vorster. Norman Eaton passed away on the 19th of July 1966 as a result of injuries sustained in a motor car accident.	1966	
	A memorial service held for Eaton , procedures thereof published in the SAAR (February 1968); tributes from fellow artists, architects and others accompanied a slide-show of his works with a commentary and his interests in music, history and art were recorded. The Gold Medal of the Institute of South African Architects was awarded to him posthumously. A South African brick-manufacturing firm changed the name of its scholarship to the Norman Eaton Architectural Scholarship in 1966.	1968	

TIMELINE AND CHRONOLOGICAL LIST OF THE DESIGNS OF EATON

International event or building of significance Buildings or projects highlighted in blue were referenced in the text of the main document	South African event Red indicates events in Eaton's life Blue indicates buildings of significance that were referred to in the main body of text	Date	Project/Building by Norman Eaton The year in which planning of a project started was indicated. The sign * indicates whether the project was realized based on availability of information at the time. Projects appear in the exact chronological order as per dates on drawings archived at the University of Pretoria.
	The Department of Architecture at the University of Pretoria implemented a punch-card system to index and retrieve information from architectural journals that would evolve into TOBi (<i>Trefwoordestelsel vir die Ontsluiting van Boukundige inligting</i> / [Keyword System for the Retrieval of Architecture and Building Science Information]) under lecturer Hans Wegelin. Articles from 93 international and South African journals were indexed over the years to enable users to access information on architects, buildings, building materials and methods, design theory and urban design. (http://www.artefacts.co.za/main/Buildings/articles.php?artid=388 [Accessed: 15/01/2013])	1973	
	The TOBi punch-card system (see 1973) converted by Prof Hans Wegelin and Mike Pinto of Target Computing Systems into a DOS-database (also see 1996). (http://www.artefacts.co.za/main/Buildings/articles.php?artid=388 [Accessed: 15/01/2013])	1981	
	The bulk of drawings, personal papers, letters, autobiographical memorabilia, photo albums and other records of projects by Norman Eaton, was handed over to the Department of Architecture at the University of Pretoria. The donation was made by Prof Tobie Louw, inaugural head of the Department of Quantity Surveying, friend, colleague and business partner of Norman Eaton, heir and trustee of the collection, who was a partner at the architectural firm Tectura - the partnership which has its origins in the 1952 association between Eaton and Louw (see notes 1952). The drawings resorted in the 'Archive' of the Department and formed its nucleus. Anton du Toit, then member of staff of the Department, instigated that the collection be donated to the Department as inception of the Archive. (http://repository.up.ac.za/handle/2263/154 [Accessed: 12-01-12]).	1989	
	Prof Roger Fisher presented Norman Eaton – the Scars of -Scape at the inauguration of the Pretoria Institute for Architecture.	1995	

TIMELINE AND CHRONOLOGICAL LIST OF THE DESIGNS OF EATON

International event or building of significance Buildings or projects highlighted in blue were referenced in the text of the main document	South African event Red indicates events in Eaton's life Blue indicates buildings of significance that were referred to in the main body of text	Date	Project/Building by Norman Eaton The year in which planning of a project started was indicated. The sign * indicates whether the project was realized based on availability of information at the time. Projects appear in the exact chronological order as per dates on drawings archived at the University of Pretoria.
	The TOBi DOS-database, adapted from the punch-card system (see 1973, 1981) was adapted for a Windows-environment under Prof Hans Wegelin. At the same time TOPi (Trefwoordstelsel vir die Ontsluiting van Plan-inligting [Keyword System for the Retrieval of Plan Information]) and TOSi (Trefwoordstelsel vir die Ontsluiting van Skyfie-inligting [Keyword System for the Retrieval of Slide Information] was initiated. (http://www.artefacts.co.za/main/Buildings/articles.php?artid=388 [Accessed: 15/01/2013]).	1996	
	Academic Information Service (library) established access to TOBi (see 1973, 1981, 1996) and it was renamed ArchUP . (http://www.artefacts.co.za/main/Buildings/articles.php?artid=388 [Accessed: 15/01/2013]).	2001	
	The retrospective exhibition of the 'Gentle Anarchist' (2005), Walter Battiss at the Standard Bank Gallery, Johannesburg.	2005	
	<p>'Picasso and Africa' exhibition (2006) re-affirmed the interest in the space between Europe and Africa at the Standard Bank Gallery, Johannesburg.</p> <p>UPSpace, the institutional research repository was implemented (http://www.artefacts.co.za/main/Buildings/articles.php?artid=388 [Accessed: 15/01/2013]). The high-resolution scanning and uploading process of Eaton's repository commenced and would continue over the next few years. With the launching of the UPSpace endeavour, all photographs and diaries from the Eaton Repository which were scanned and uploaded, were lodged in the Pretoriana Room, Special Collections Unit, Merensky Library.</p>	2006	
	Access to the databases of ArchUP (TOBi, see 1973, 1981, 1996, 2001) and PlanUP (TOPi, see 1996) was transferred to Sabinet on 24 July 2008. The archival material indexed on PlanUP was accessed on UPSpace , now <i>via</i> Sabinet. (http://www.artefacts.co.za/main/Buildings/articles.php?artid=388 [Accessed: 15/01/2013]).	2008	
	Exhibition: ' Alexis Preller: Africa, the Sun and Shadows ' (2009) at the Standard Bank Gallery.	2009	

TIMELINE AND CHRONOLOGICAL LIST OF THE DESIGNS OF EATON

International event or building of significance Buildings or projects highlighted in blue were referenced in the text of the main document	South African event Red indicates events in Eaton's life Blue indicates buildings of significance that were referred to in the main body of text	Date	Project/Building by Norman Eaton The year in which planning of a project started was indicated. The sign * indicates whether the project was realized based on availability of information at the time. Projects appear in the exact chronological order as per dates on drawings archived at the University of Pretoria.
	<p>ableUP (African Buildings and Landscape Environment) portal launched officially on 4 May 2010 with an online archive (ABLESpace, the institutional repository digital collections of the Department) a wiki (ableWIKI), a blog, forum (ABLEforum) and an integrated search function; ableUP is a community service which actively promotes the understanding, documentation and conservation of our built heritage; initiated and managed by Nicholas Clarke and run by Henning van Aswegen. (http://www.artefacts.co.za/main/Buildings/articles.php?artid=388 [Accessed: 15/01/2013])</p>	2010	
<p>Oscar Niemeyer passed away at the age of 104: he had been practicing as an architect and designer up until his death on 5 December</p>	<p>Besides a selection of diaries, the bulk of Eaton's drawings of domestic projects was by now accessible on UPspace, a total of 392 drawings (original sizes varying between A3–A0). Another 431 drawings of his non-residential work (original sizes varying between A1–A0) have also been scanned to date and were ready to be uploaded onto the system. An additional 489 items (original sizes varying from A4 – A3) consisting of Eaton's photo journals, personal <i>memorabilia</i>, letters and diaries have been scanned to date and were ready to be uploaded to UPspace. Peter Kuhn, partner from the architectural firm Tectura, submitted more material to the repository of Norman Eaton (see entries 1989 and 1952).</p> <hr/> <p>In 2012 the Norman Eaton Medal was established by the Pretoria Institute for Architecture to honour an architect or architectural practice in recognition of a significant body of work of lasting influence on the theory and practice of architecture within the Pretoria region. The first award has been bestowed on local architect, Aziz Tayob.</p> <hr/> <p>The Greenwood House (1948–1951), Pretoria and Netherlands Bank (1960–1965), Durban were published in <i>20th-Century World Architecture: the Phaidon Atlas</i> (London: Phaidon) The book comprises of an unprecedented global scope of over 750 of the most outstanding regional works of architecture built between 1900 and 1999 world-wide.</p>	2012	

APPENDIX B

Dramatis Personae

The Dramatis Personae is an introduction to the individuals mentioned in the main body of the text, all of whom played a part in the creation of an *esprit de système*, from the turn of the previous century to the late 1960s and beyond.

- Prominent individuals, ranging from well-known artists, political figures and advocates, for whom Eaton had designed houses are included in the brief biographies.
- The association between the individual and Eaton is highlighted where relevant.
- The first biography is on Eaton himself. The remainder of the biographies follows in alphabetical order.
- Appendix B should be read in conjunction with Appendix A, as should the timeline of Eaton's biography in relation to national and international works, events and relevant contemporaries.

Norman Musgrave Eaton (1902–1966)

Eaton was born in Pretoria on 11 October 1902. Of significance were his Afrikaner roots from his mother, Maria Brand, who was closely related to John Brand, one time president of the Free State (Eaton, 1966:53).

Eaton received his education in Pretoria and at the Diocesan College, Cape Town (1915–1921). In 1922, he enrolled for the diploma course in architecture at the University of the Witwatersrand and from 1923–1928 he studied under Professor G. E. Pearse. From his second year until 1930, he was articled to Gordon Leith, who had in turn worked for Baker. On Leith's winning the competition for the Pretoria Technical College in 1926, he placed Eaton in charge of the office in Pretoria. Eaton remained in Leith's office until he won the Baker scholarship in 1929 and spent nine months in residence at the British School at

Rome before visiting France, Greece, Turkey and Austria and touring Italy in 1930. Eaton graduated with a Diploma in Architecture in April 1930. In November 1931, he visited Germany, Holland, Belgium and Britain.

During this period, Eaton made contact with Sir Herbert Baker who signed his nomination papers for associate membership of the RIBA. He visited Egypt on his return to South Africa (Harrop-Allin, 1975:24) and established a private practice in Pretoria in 1932. According to his biographical notes (*Pretoriana*, Dec 1966:54), he only returned to South Africa in 1933. However, two projects, namely Farmstead Hill, near Luns-klip, Transvaal and alterations to the Barclays Bank, East End branch, Pretoria, date from respectively 28.10.1932 and 7.10.1932.

Eaton's offices were initially at 52 Gresham Buildings, Andries Street, later 38 Gresham Buildings, before he moved to Velra House, Bureau Lane, Pretoria.

Throughout his career, Eaton undertook study tours abroad: to Europe, the Middle East, the Americas, India and Japan (refer to **Appendix A** for respective dates). While in America, he had, amongst others, met Oscar Niemeyer, visited Richard Neutra's offices in Los Angeles, met Frank Lloyd Wright at Taliesen, spent a day with 'Frank' in Chicago and met Mies van Der Rohe (refer to **Appendix A** for respective dates).

His most regular ports of call, however, were the countries of Africa, where he meticulously compiled diaries, sketches, and photo journals of local art and architecture. His work reflected his concern for the African in South Africa, especially from the 1940s onwards. This sentiment was shared with others of the period such as Alexis Preller and Gerard Moerdyk.

Spanning from 1932 to 1966, Eaton's work belongs to roughly three periods. Although the dates do not strictly concur with those of World War II

(WWII) from 1939–1945, these eras are divided as follows:

- 1930–1940: The pre-war period
- 1941–1945: The war period (building restrictions)
- 1946–1966: The post-war period

His early work from 1930 to 1940 oscillated between a domiciled national romantic heritage (Chipkin, 2008:375) and tempered versions of the Modern Movement as manifested in the erstwhile Transvaal. The restrictions on building materials from the period 1941 to 1945 had a direct impact on the architectural language and choice of materials of his work during the war period. Ultimately, the lineage of Eaton's work evolved into a more organic approach from approximately 1946 onwards. The lineage of his built *oeuvre* demonstrated an ever-growing sensitivity to landscape and place. From the outset of his career, his work embodied an empirical response to climate and economical use of industrially produced materials, especially brick. Eaton became the main protagonist of a so-called Pretoria Regionalism or Third Vernacular (Fisher *et al* 1998:124).

Eaton had designed numerous houses for well-known artists, political figures, advocates and doctors. His best domestic works are Houses Greenwood (1948–1953) and Anderssen (1949–1954), both in Pretoria. He is possibly best known for his banks, most notably the Netherlands Bank, Pretoria (1946–1955), and the Netherlands Bank (1960–1965), Durban, which is considered his masterpiece. He was awarded the Medal of Honour for Architecture by the *SA Akademie vir Wetenskap en Kuns* in 1960 for his services to architecture.

His sudden death in a motor accident in Pretoria provoked an unprecedented response from the art and architectural community. His friend

Alexis Preller observed at his memorial service that Eaton's 'favourite words were "simple, delicate, sensitive, individual" and the ever recurring phrase, "African quality" ... his outstanding use of the simple brick is already legendary' (Preller, 1966:10).

For a full list of partnerships, travels and projects, refer to the timeline, Appendix A. (Anon in Beck, 1985: *sans* page number; Cooke in Beck, 1985:60; Eaton, 1966:52–53; Harrop-Allin, 1987: 228–229; Harrop-Allin, 1975:123; <http://www.artefacts.co.za/main/Buildings/archframes.php?archid=450> [Accessed: 16-01-13])

In alphabetical order:

Alvar Aalto (1898–1976)

Hugo Hendrik Alvar Aalto was a renowned Finnish architect and designer of furniture, textiles, and glassware. His work had many parallels with that of Eaton, reflecting a constant debt to National Romantic tactility. Like Eaton, he had developed an organic modern architectural language in contrast to the formality propagated by the CIAM grouping of 1928 (see Appendix C).

Spanning from the 1920s to the 1970s, his early work showed Nordic Classicist influences, rational Modern influences prevailed during the 1930s and ultimately his work evolved into a more organic approach from the 1940s onwards, to the extent that Frampton described him as belonging to the group of 'Northern European Expressionist architects' (Frampton, 1980; 1992: 202; Schildt, 1998).

Sir Herbert Baker (1862–1946)

Sir Herbert Baker was a renowned British architect who had been a dominant force in South African architecture during his stay 1892 to 1913. His finest architectural contribution is arguably the Union Buildings (1909–11), Pretoria. Baker left South Africa in 1913 to collaborate in the

building of New Delhi. He did not return to South Africa to practice (Keath, M. 1998, 'The Baker School, a continuing tradition 1902–1940', in Fisher *et al*, 1998:79–93).

In 1911–12, he instituted the Baker scholarship, to be awarded to a student who presented the best design and the best essay in support of a prescribed project. Both Eaton and his mentor, Gordon Leith, were respective recipients of the scholarship. As a result of his sterling career, Baker was knighted in 1923, and was honoured with honorary doctorates of law from the Universities of the Witwatersrand (1934) and Oxford (1937) respectively (Greig, 1968:44–47).

Walter Battiss (1906–1982)

Walter Whall Battiss was a renowned South African artist, arguably the foremost South African abstract painter. He had grown up in the Karoo and Free State, where he was to discover ancient Africa through its rock art and artefacts, which were of great importance in his formation as an artist. He obtained a B.A. (Fine Arts) at the University of South Africa (UNISA) in 1940. He taught at several schools and was art teacher at the Pretoria Boys' High School from 1936 to 1953. He briefly accepted the Chair of Fine Arts at Rhodes University, Grahamstown in 1959, before returning to Pretoria Boys' High School until 1964 and subsequently was appointed as professor of history of art and fine arts at the University of South Africa (Harmsen, 1987:36–37).

In 2005, the Standard Bank Gallery exhibited a comprehensive retrospective of his work, entitled 'Walter Battiss: Gentle Anarchist', highlighting amongst others the influence of Southern African San rock art on his work. Eaton had designed his house, Giotto's Hill, Pretoria (1939).

Esias Bosch (1923–2010)

Esias Bosch was a distinguished South African ceramicist and considered to have been the

'doyen of studio pottery' in South Africa. He lived and worked for fifty years in the Mpumalanga *Lowveld*, in a home and studio (1961) designed by his friend Norman Eaton.

In 1963 he was awarded a silver medal by the Smithsonian Institution in the Ninth International Exhibition of Ceramic Art in Washington DC; he was invited to enter work for the prestigious International Ceramics Exhibition at the Victoria and Albert Museum in 1972 and in 1983 he held a very successful exhibition of large lustre tiles in Hanover, Germany. One of the tiles was purchased by the Keramion Museum in Cologne for their international collection of ceramics.

In the years to follow, he would receive numerous awards, including the Oude Libertas Award and a medal of honour by the South African Academy for Science and Art (From: <http://esiasbosch.wordpress.com/> [Visited on 15 December 2012]; <http://mieliestronk.com/bosch.html> [Visited on 15 December 2012]).

Bernard Cooke (1910–2011)

Bernard Stanley Cooke was born in England, emigrated to South Africa in 1920, and studied architecture at the University of the Witwatersrand from 1928 to 1932. Together with John Fassler, he was one of the first two students to graduate with distinction since the establishment of the School of Architecture in 1921. As a contemporary and friend of Rex Martienssen, he had also arduously studied Le Corbusier and would later join Martienssen and Fassler in a brief, but important, association as Martienssen, Fassler & Cooke.

The firm's most important contribution to the local profession was House Stern (1934–35), Johannesburg, which exemplified the traits of the International Style (Cooke in Beck, 1985:59; Munro and Kotze; 2011:38–43; <http://www.artefacts.co.za>).

Robert Cole Bowen (1904–1976)

Robert Cole Bowen attended the School of Architecture at the University of the Witwatersrand in 1923. He was obliged to leave after only a year in order to support himself, and was employed by the Public Works Department in Pretoria on a temporary basis from 1924, attending architectural classes in Pretoria. He certificated in 1928 but was only fully qualified after the Second World War, and later became a senior lecturer in Architectural Design at the School of Architecture in Pretoria. He had assisted Eaton in the design for the unexecuted Ministry of Transport Building (1945–48) (Harrop-Allin, 1975:47, <http://www.artefacts.co.za>).

Douglas Maurice Cowin (1911–?)

Douglas Cowin was born in Pretoria and studied architecture at Liverpool School of Architecture from 1928 to 1933. During this period he travelled extensively in Europe. On his return to South Africa, he had significantly independent attitudes towards modern architectural design, different from those held by the Transvaal Group.

Cowin joined his father's firm of Cowin, Powers & Ellis in Johannesburg, October 1933 and specialized in private houses. The year after his return, his design (under the name of Cowin, Powers & Ellis) for a house, won first prize in the Ideal Homes Competition (1934) organised by the Rand Daily Mail. It was a significant win for modern architecture in South Africa, but an 'eclectic piece awkwardly [combining] elements of Loos and Le Corbusier' (Barker, 2012:94). By contrast, Casa Bedo (1936–1937), his own house, was influential as a Transvaal suburban vernacular (Cooke in Beck, 1985: 59; Chipkin, 1993: 185–187; <http://www.artefacts.co.za/main/Buildings/archframes.php?archid=317> [Accessed on 11-12-12]).

Michel de Klerk (1884–1923)

Michel de Klerk was a Dutch Expressionist architect, who was also one of the founding members of the so-called 'Amsterdam School' (Joubert, 1999:203). Eaton had visited some of his work in Europe during 1934. A postcard in the Eaton Repository, dated 13.8.34 from the Dutch architect H. Wach reads that 'you will be received with pleasure'. The postcard is part of a photo album that includes the following series of buildings: Karl Marx Hof, Wien Heiligenstadterhof, Wien Bartenstadt, Wien Lindenhof Kreuzgasse. There are also postcards of 'Modern Amsterdam', Architect M. De Klerk 1923–24, Amstellaan and Antwerp (Eaton Collection, UP Repository).

Karl Ehn (1884–1957)

Karl Ehn was a Viennese architect and city planner. Among other structures, he had designed the monumental expressionist housing scheme *Karl Marx Hof*, Vienna, which Eaton had also visited during 1934. See entry on Michel de Klerk.

Gabriël Fagan (1925–)

Gawie Fagan is a renowned South African architect, based in Cape Town. His work is regionally rooted and is described by Barker as creating a 'new' architectural language that mediates between the 'Cape vernacular, functional requirements and response to an education in Modernism' (Barker, 2010:14). Fagan has been the recipient of numerous Gold Medal Awards, and two honorary doctorates.

Eaton taught Fagan for a year as a student at the University of Pretoria (Chipkin, 2008:378; also see Barker, 2012).

Alan Fair (1933–1977)

Fair had graduated with a Diploma in Architecture from the University of Witwatersrand in March 1933. Similarly to Eaton, he had worked

in the offices of Gordon Leith and in 1939; he entered into a partnership with Eaton that was dissolved in 1945. He subsequently formed part of the firm 'Norman Eaton and Partners' to execute the ambitious Ministry of Transport building (1945-48, never built) (<http://www.artefacts.co.za>).

John Fassler (1910–1971)

John Fassler became an important figure on the South African architectural scene. He studied architecture at the University of the Witwatersrand from 1928 to 1932. Fassler joined the staff under Prof G.E. Pearse in 1934, and ultimately succeeded him as the Head of School from 1948–1967. He had been one of the group of students to form *zero hour* (sic) under Martienssen's leadership, with whom he also briefly entered into partnership in association with Cooke. From 1936–1937 he visited Europe and met Le Corbusier in Paris in 1937. Fassler ultimately re-evaluated Corbusian modernism and reverted to a Perret-inspired new classicism and humanized functionalism (Cooke in Fisher *et al*, 1998:231–251; <http://www.artefacts.co.za>).

Mira Fassler-Kamstra (1938–)

Mira Fassler-Kamstra, daughter of John Fassler, obtained her architecture degree at the University of the Witwatersrand in 1961. She inherited her father's practice and later entered practice with Marcus Holmes from 1978 to 1997. She has won numerous awards and was the first Sophia Gray *Laureate* at the University of the Free State in 1989. Her lecture and exhibition was entitled 'Mimicry and Camouflage'. She currently has her own practice (*Anon* in Beck, 1985:*sans* page number).

Bram Fischer (1908–1975)

Political activist, anti-Apartheid struggle icon, and one-time leader of the South African Commu-

nist Party, Abram 'Bram' Fischer was born into a prominent Afrikaans family. As an advocate, he had amongst others defended Nelson Mandela, Walter Sisulu and other ANC leaders for participating in the Defiance Campaign in 1952. He was banned under the Suppression of Communism Act from most gatherings and from the Congress of Democrats in 1953.

For years thereafter, there were police raids on his advocate's chambers and his house, designed by Eaton in 1938. The sketch design is in the Repository, while Eaton had also kept a newspaper clipping on Fischer's arrest among his personal memorabilia (Haasbroek, 2011; Moll, 1987:263–264; UP Repository).

Walter Gropius (1883–1969)

Walter Adolph Georg Gropius was a German architect and founder of the Bauhaus School, who is widely regarded as one of the pioneering masters of modern architecture. His buildings are distinguished by a classical restraint, excellence in proportion, and adventurous use of modern materials of steel, concrete and glass. He could be regarded as the principal innovator in the use of the complete glass screen in forming the outer shell of a building. Gropius regarded standardization and prefabrication as key to all architectural products (Whittick in Hatje, 1971:139–145).

Norman Leonard Hanson (1909–1991)

Norman Hanson studied architecture at the University of the Witwatersrand from 1926 until 1931 and was also a contemporary of Martienssen. They shared an interest in modern European architecture, and Hanson was part of the so-called Transvaal Group (so-called by Le Corbusier himself to describe the young disciples of the Modern Movement in Johannesburg) who was influenced by Le Corbusier and Mies van der Rohe (Joubert, 2000:118). He opened Hanson, Tomkin and Finkelstein (1932), and was

central to the emergence of the Transvaal's International Style. Among his early works was *Hotpoint House* (1934) in Johannesburg. Herbert (1975:137) maintained that the building 'was the first major South African building authentically in the modern idiom to appear in the pages of any South African publication' (Cooke in Beck, 1985:59).

Clinton Harrop-Allin (1936–)

Clinton Harrop-Allin is the author of *Norman Eaton: Architect. A Study of the work of the South African architect Norman Eaton 1902–1966* (1975: Cape Town and Johannesburg: C. Struik publishers). Harrop-Allin was an art teacher at Pretoria Boys High School and later also lectured in Art History at the University of South Africa (UNISA) where he had completed a Masters' Degree on Eaton's work in 1972.

André Hendrikz (birth date unknown)

Younger brother of artist Willem de Sanderes Hendrikz, André Hendrikz was one of a group of Johannesburg architects who were significantly influenced by Eaton (Chipkin, 1993:287, 296). Eaton had left two Zanzibar doors to him upon his death (*ibid.*: 296). See Johannesburg Vernacular (1950s–1970s), Appendix C.

Willem de Sanderes Hendrikz (1910–1959)

Hendrikz was a noted artist for the embellishment of buildings and did many bas relief panels for banks, building societies etc., amongst others he was responsible for the sandblasting of the frieze in the Hall of Achievement in the 1935–37 Eskom House, Johannesburg, designed by Cooke, Pearse and Fassler (Chipkin, 1993:287, 296). His major work was the mythological 'Rain Goddess', Rand Water Building, Johannesburg. Some of his work can also be seen on the SABC Building in Cape Town. He had started his studies in architecture at the Uni-

versity of the Witwatersrand, before changing courses to study art. In addition to the connection with Eaton *via* his brother, he was also responsible for the brass doors of the Bank of Netherlands (1946), Pretoria designed by Eaton. Eaton had also designed his humble dwelling (1951) in Swalkerskraal, Plettenberg Bay (UP Repository), which is where he had taken his own life in 1959 (Werth, 1987: 339–340).

Henkel, Irmin (1921–1977)

Irmin Henkel, a German artist who resided in Pretoria after emigrating 1951, was a close friend of architect Hellmut Stauch. Eaton had apparently designed a house for him (Walters in Fisher *et al*, 1998:177), but there are no drawings in the UP Repository to establish date or location. In turn, Henkel had done a portrait of Eaton, which today hangs in the offices of the Pretoria Institute for Architecture, Brooklyn Road, Pretoria.

Educated as an orthopaedic surgeon, he was mostly a self-taught portrait artist. His commissions included portraits of amongst others, Dr D.F. Malan (1874–1959), Dr H.F. Verwoerd (1901–1966), and Adv C.R. Swart (1894–1982) (Beyers, 1987:340).

Karel Jooste (1925–1971)

Jooste was an influential South African architect, educated and based in Pretoria. As a student, he worked for Norman Eaton. He was particularly interested in Le Corbusier's Modulor and spent most of his professional life developing proportional systems based on the ideal. His architecture was a direct response to the South African cultural and environmental landscape, with Modern Movement and Brazil Builds influences. His best-known building is arguably the Aula (1951–58) at the University of Pretoria. Jooste's work belongs to Pretoria Regionalism (Barker, 2012:499; Fisher in Fisher *et al*, 1998: 127–147).

'Ora Joubert (1959–)

Prof. 'Ora Joubert is a respected South African academic and practitioner, currently based in Pretoria. Drawing from regional culture, her work has received critical acclaim both nationally and internationally. She was cited in 2001 as one of the most internationally esteemed architects under the age of 40 in *40 Architects under 40* (Cargill-Thompson, J. Köln: Taschen, 2001) and her work was included in *The Phaidon atlas of contemporary world architecture* (London: Phaidon, 2004). Amongst other academic positions, Joubert was head of the Department of Architecture at the University of Pretoria from 2004 to 2008.

Le Corbusier or Charles-Édouard Jeanneret-Gris (1887–1965)

Despite never having received any official architectural education, Le Corbusier is considered the most influential architect of the twentieth century. He served apprenticeships to leading figures of the Modern Movement. His meeting with Amédée Ozenfant (1886–1966) led to the founding of Purism, a highly original aesthetic movement. During the purist phase of his career (1917–1930), Le Corbusier refined the Domino structural system and the development of his generic housing prototypes and controversial urban-planning schemes. *Vers une architecture* [Towards a New Architecture], his influential manifesto, was published in 1923 and was realized via a series of villas, with Villa Savoye, Poissy (1929–1931) still considered the ubiquitous icon of modernity.

His example was echoed by the endeavours of the pioneering South African modernists and their *zero hour* (sic) initiative. Le Corbusier dedicated the 1937-edition of the first volume of his *Oeuvre Complete* to the 'Transvaal Group', as he called the young pioneers led by Martienssen.

Le Corbusier changed direction after 1930 to

pursue a more regionally and climatically responsive architecture, which could better withstand the test of time and place (Joubert in De Beer, Jacobs *et al*, 2000:118).

George Esselmont Gordon Leith (1886–1965)

Gordon Leith was an eminent South African architect who worked in the Classical language established by Baker, for whom he had also worked, assisting with the Union Buildings (1910). Leith was the first recipient of the Herbert Baker Scholarship and travelled to the British Schools in Rome and Athens, 1911 to 1913. He had previously attended the old *Staats Model Skool* where he received his first formal education through the medium of *Hoog Hollands* and had as fellow students Henk Pierneef and Gerard Moerdyk. During the Anglo-Boer war years, Leith had also spent much time learning drawing and modeling under Anton van Wouw.

He was a part-time lecturer at the Department of Architecture at the University of the Witwatersrand under Pearse. Leith was an important influence in Eaton's education, he was his mentor while Eaton was apprenticed to his office from 1924 to 1930, and had also exposed him to his circle of friends and colleagues (Beyers, Krüger, 1977:506; Eaton, 1965:12).

Tobie J. Louw (unknown)

Tobie J. Louw became Eaton's partner in 1952. In 1967, after Eaton's premature death, the firm was transformed to Louw, Marais, Marquart and Kuhn, which remained until 1980 when the name was changed to Tectura Architects. Louw was the inaugural head of the Department of Quantity Surveying, friend, colleague, and business partner of Norman Eaton and heir and trustee of Eaton's archival collection.

Louw had been one of the Chairmans of the S.A. Council of Architects (Interview with Peter Kuhn, partner at Tectura Architects on 16-01-

2013; <http://repository.up.ac.za/handle/2263/154> [Accessed 15-01-2013]).

Eugène Nielen Marais (1871–1936)

Marias was a well-known lawyer, gifted naturalist, innovative literalist and heralded Afrikaans poet. He was an editor of the newspaper, *Land en Volk* and also became controversial in Transvaal politics (De Kock, 1968:504–507).

Rex Distin Martienssen (1905–1942)

Considered as the principal pioneer of the South African Modern Movement, Martienssen's role in promoting modern architecture lay in the work he executed, in his articulate enthusiasm for the art of his time and in his various publications. His enthusiastic and intellectual explorations of both classical and modern architecture through his lectures, teaching and writings between 1925 and 1942 were highly influential in the architectural arena.

After having graduated from the University of the Witwatersrand in April 1930, he joined the staff of the Department of Architecture. From 1936, he was also a part-time lecturer in architecture at the University of Pretoria. In 1933, Martienssen visited Le Corbusier and brought him a copy of *zero hour* (sic), which led to years of subsequent correspondence and friendship between the two. A letter written to him by Le Corbusier was used as the foreword to the new (1937) edition of *Le Corbusier et Pierre Jeanneret: oeuvre complète de 1919–29* (Le Corbusier and Jeanneret, 1943).

On his return from Europe in early 1934, he entered into an association with Fassler and Cooke to practice architecture, resulting in various prominent works, of which House Stern (1934) was the most significant. In 1940 he received a master's degree for his dissertation on Constructivism, and in the following year a D. Litt. degree for his thesis entitled *The Idea of*

space in Greek architecture (1941) that was published posthumously (1956). His premature death in a car accident in 1942 ended his stellar career, after having completed his own house (1939–40), a seminal academic masterpiece (Greenside, Johannesburg) (Chipkin, 1993; Herbert, 1969; Kossick, 1977:584–585; <http://www.artefacts.co.za/main/Buildings/archframes.php?archid=1053> [Accessed: 10-10-12]).

Roberto Burle Marx (1909–1994)

Roberto Burle Marx was a Brazilian landscape architect whose work often complemented well-known modern buildings. Marx designed his first garden for the house of Lúcio Costa (1902–1998), who was later one of the architects of the Ministry of Education and Health building (1937–43) in Rio de Janeiro for which Marx also did the landscape design.

Although Eaton had never actually met Marx, he had been exposed to his work upon visiting South America during 1945. In 1973, Marx was one of the prominent speakers at an influential environmental congress in Pretoria themed 'Planning for Environmental Conservation' (<http://www.artefacts.co.za/main/Buildings/articles.php?artid=388> [Accessed on 16-01-2013]; Eliovson, 2003:263-273).

William Gordon McIntosh (1904–1983)

McIntosh is generally considered to be the earliest exponent of the International Style in the Transvaal with the execution of House Munro, Pretoria, 1932. He studied architecture from 1923 to 1926 at the University of the Witwatersrand, where he became a close friend of Martienssen and was part of the so-called 'Transvaal Group'. His own house, House McIntosh (1936–1937), has some parallels with early work of Eaton in Pretoria, demonstrated in Motif Sheet 3.

'In 1929 he became a part-time lecturer in Engineering at the Transvaal University College,

Pretoria, where he was closely involved with the development of the College through to its acquiring University status and in particular with the development and organization of the School of Architecture' (<http://www.artefacts.co.za/main/Buildings/archframes.php?archid=1958> [Accessed 14-01-2013]; Cooke in Beck, 1985:59).

Professor Adriaan Louw Meiring (1904–1979)

Meiring was the first professor of Architecture at University of Pretoria in 1943. He studied Philosophy and Languages at the University of Cape Town, graduating in 1924 and shortly afterwards turned to architecture. He subsequently attended the Liverpool School of Architecture from October 1929 until July 1932, travelling in Europe during this period. His Fellowship papers (1951) state that he was at the Liverpool School of Architecture from 1928 to 1931 when he received a first class Honours degree.

After accepting the Chair of Architecture at University of Pretoria, he designed a number of buildings for the campus of the University of Pretoria including the Dental School. He undertook pioneer studies of Ndebele building on which he published articles and was instrumental in establishing one of the early outdoor museums on Ndebele culture. He was a recipient of the Medal of Honour for Architecture by the *SA Akademie vir Wetenskap en Kuns* in 1956 (<http://www.artefacts.co.za/main/Buildings/archframes.php?archid=2364> [Accessed 15-01-2013]).

Erich Mendelsohn (1887–1953)

Mendelsohn was a Jewish German architect, known for his expressionist architecture during the 1920s. The 'curvilinear Mendelsohnian corner' (Chipkin, 1993:140; Cooke, 1988:17) had been filtered down to amongst others Gordon Leith *via* Martienssen. The latter was one of many students from the University of the Witwatersrand who had been to Europe to encounter

Mendelsohn's work first hand. Interestingly, Mendelsohn visited Cape Town for one day in 1941 *en route* to the USA, humorously recounted by Gilbert Herbert in *Architecture SA* (1987:22–23).

Gerard Leendert Pieter Moerdyk (1890–1958)

Moerdyk (also Moerdijk) is arguably the best-known Afrikaans architect of his time, with close links to the rise of Afrikaner nationalism. Moerdyk had propagated a place-specific architecture rooted in African soil. He had an industrious career, with the *Voortrekker Monument* (1937–1939, inaugurated 1949) arguably being his best-known building. It was mainly in the field of church building that he adopted a new approach to style while using natural South African building materials. While his training was as a classicist, his work gradually transformed to being locally inspired. His importance in the architectural field lies in the fact that he was a transitional figure. He was a friend of Leith's (Roodt, 1977:622–624).

Richard Neutra (1892–1970)

Austrian Richard Joseph Neutra was trained at the *Technische Hochschule* in Vienna and received his diploma in 1917. He was hugely impressed with the work of Adolf Loos (1870–1933) and Otto Wagner (1841–1918). He had had a brief association with Erich Mendelsohn before moving to the USA in 1923 where he worked with amongst others Frank Lloyd Wright (1867–1959) and Rudolph Schindler (1887–1953). Subsequently based in Southern California, he came to be considered among the most important modernist architects (Whittick in Hatje, 1971: 213–215).

Neutra had visited South Africa on two separate occasions, 1958 and 1961 respectively (Peters in Fisher *et al*, 1998:185). Interestingly, Eaton had visited his offices while on tour in the Americas during 1945, where he had obtained original

Julius Schulman (1910–2009) photographs of Neutra's V.D.L House (1932–1933), Silverlake, California, USA now part of the UP Archival collection. Schulman was one of the world's most pre-eminent architectural photographers.

Oscar Niemeyer (1907–2012)

Oscar Ribeiro de Almeida Niemeyer Soares Filho was a Brazilian architect who is considered the leading exponent of modern architecture in Brazil. His exploration of the aesthetic possibilities of reinforced concrete was highly influential. He was initially inspired by Le Corbusier who had consulted on the design for the well-known Ministry of Education and Health building during 1936, where Niemeyer as an intern in Lúcio Costa's office, also took an important role in the design process. Inspired by Brazilian Baroque precedent, Niemeyer's own work became recognizable for the use of curved lines, disregarding the tenets of orthodox Functionalism (Mindlin in Hatje, 1971:215–217).

Eaton had met with Niemeyer on his trip to the South Americas during 1945 (Eaton's diary entry 28/8/1945, Eaton Repository).

Aubrey Victor Nunn (1905–?)

Nunn entered the architecture course at the University of the Witwatersrand before attending the *Architectural Association*, London, from 1929 to 1931. He was employed by the Great Western Railway Architectural Department in London from July to September 1930. On winning the Henry Jarvis Scholarship in September 1930, he visited various European destinations. From February 1931, he worked for six months in Herbert Baker's office in London, before taking the RIBA professional practice examination in 1931.

He returned to South Africa in 1931, settling in Pretoria where he opened his own practice. According to Nation (*Lantern*, Feb 1989:29), Nunn offered Hellmut Stauch employment which he

took up in 1935 (<http://www.artefacts.co.za/main/Buildings/archframes.php?archid=1178> [Accessed 14-01-2013]).

Geoffrey Eastcott Pearse (1885–1968)

Pearse was appointed as the first Professor of Architecture at the University of the Witwatersrand in 1921 and thus became first Professor of Architecture in South Africa.

Pearse continued as Professor until he retired in 1948. His interest in history and education led to the foundation of the Department of Fine Arts at the University, and Pearse was supportive of the development of architectural courses at Pretoria leading to the foundation of the School of Architecture, University of Pretoria in 1943. He is probably best known for his book *Eighteenth century architecture in South Africa* (London, 1933), to which Eaton contributed drawings as a student. Outside the University, his most notable building is perhaps Eskom House (1934), Johannesburg.

He received an honorary doctorate of architecture from the University of the Witwatersrand (1954) and the medal of honour for architecture of the *Suid-Afrikaanse Akademie vir Wetenskap en Kuns* (1964). He also received the gold medal of the Institute of South African Architects (1966) (Radford, 1981:453–454; <http://www.artefacts.co.za/main/Buildings/archframes.php?archid=1247> [Accessed 14-01-2013]).

Auguste Perret (1874–1954)

Auguste Perret was a French architect, trained at the *Paris École des Beaux-Arts* (he never finished). His work oscillated between modernism and neo-classicism. As he grafted neo-classical features onto concrete, his work was widely criticized. However, he did make it possible to use reinforced concrete in architecture to an extent far exceeding those of his contemporaries. In addition, his system of framed structures exem-

plified 'honest building'. Especially his industrial buildings rank amongst the most important architectural efforts to exemplify the industrial age. His research efforts into standardization and industrialization were no doubt not lost on one of his young one-time pupils, Le Corbusier (Besset in Hatje, 1971:224–225).

Pablo Picasso (1881–1973)

The artistic genius of Spanish artist Pablo Picasso (1881–1973) affected the development of modern art and subsequently, the development of a modern design idiom, with unparalleled magnitude. The influence of African art is explicit in his masterpiece 'Les Femmes d'Alger' (1907; Museum of Modern Art, New York), a painting that signals the embryonic stages of Cubism (Joubert, 1999:54–57).

Jacobus Hendrik Pierneef (1886–1957)

Jacobus Hendrik Pierneef was a South African landscape artist based in Pretoria. He became a well-known artist in South Africa where his modernist and geometric style transformed South African art. He remains the first South African artist with an entirely new vision and rendering of the South African landscape, and as such was a genuine pioneer.

He is perhaps best known for the panels he painted at the Johannesburg Park Station, now on view at the Rupert Museum in Stellenbosch. He also did the murals in South Africa House, London (1933) and two large canvases for the Johannesburg magistrate's court (1940). In 1935, he was the first artist to be awarded the medal of honour of the *Suid Afrikaanse Akademie vir Wetenskap en Kuns*.

Eaton had stayed at Pierneef's house, *Elanjeni* (1939) in Pretoria and had assisted with its design (Fisher, 1997:72; Werth, 1981:458–460).

Alexis Preller (1911–1975)

A cousin of Gustav Preller, Alexis Preller was one of South Africa's pre-eminent artists and a close friend of Norman Eaton.

In the course of his forty-year career, he had achieved national recognition and critical acclaim. He was particularly interested in the Ndebele (Mapoch) tribe near Pretoria, an interest he shared with Eaton. Amongst others, his well-known painting 'The majestic Mapoch' illustrates his fascination with especially the decorations of Ndebele women. In 1955, he was awarded the medal of honour of the *Suid Afrikaanse Akademie vir Wetenskap en Kuns*. The retrospective exhibition entitled 'Africa, the Sun and the Shadows' of his works at Johannesburg's Standard Bank Gallery during 2009, showcased his work as pioneering an African adaptation in the 20th century (<http://www.artlink.co.za> [Accessed 12-01-2013]).

Eaton had designed Preller's studio in Pretoria, *Ydragsil* in 1944 and subsequently his residence, *Dombeya*, Hartebeespoort in the 1960s, where Preller was buried in 1975 (Deichmann, Van Schalkwyk, 1987:607–609).

Gustav Schoeman Preller (1875–1943)

Gustav Preller championed Afrikaner culture and became a literary critic of great significance. He worked as editor of *Die Brandwag* and produced some history books, including a biography titled *Piet Retief* that eventually expanded into ten editions (<http://www.sahistory.org.za/people/gustav-preller> [Accessed 14-09-2012]).

Peter Rich (1954–)

Peter Rich is a well-known South African architect based in Johannesburg, whose work reflects a dedicated attempt towards the creation of authentic contemporary African architecture. In 2009, he was awarded the 'World Building of the Year' for the Mapungubwe Interpretation Center.

In 2010, Rich was awarded the prestigious Honorary Fellowship of the American Institute of Architects, and also the South African Institute of Architects' Gold Medal, the highest award for Architectural achievement in South Africa.

Henry Hobson Richardson (1838–1886)

Henry Hobson Richardson was a prominent American architect who had an influence on especially the early work of Frank Lloyd Wright. Richardson typically captured flowing, volumetric forms within an informal, Romanesque vocabulary. His plans were derived from residential English planning and French academic planning for public buildings (Laseau, Tice, 1992: 21–22). Richardson's American Shingle style in turn had a profound influence on the National Romantic manner that emerged in Scandinavia around the turn of the previous century, reaching the likes of Aalto (Frampton 1980; 1992: 192–193).

Carlo Scarpa (1906–1978)

Carlo Scarpa was a prominent Italian architect, influenced by the materials, landscape, and history of Venetian culture. His most important works include the *Museo di Castelvecchio*, Verona, Italy, 1956 to 1964; the *Olivetti showroom*, St. Mark's Square, Venice, Italy, 1957–58; the *Fondazione Querini Stampalia*, Venice, 1961–63 and the *Brion Tomb and Sanctuary*, at San Vito d'Altivole, Italy, 1969–1978. He was also a glass and furniture designer of note (Los, 1993).

Robert Gustav Schmickl (1903–1977)

Robert Schmickl was a talented Viennese architect, who spent most of his working life in Pretoria. He was a close friend of Norman Eaton, and contributed to Pretoria's regional architecture of 1940–1980. He earned his keep through his Viennese influenced buildings of outstanding architectural quality. At the invitation of the Aus-

trian consul in Cape Town, examples of his work were displayed in Vienna at the *Auslands-Österreicher-Ausstellung*, 1963.

Eaton had employed him as his backroom assistant during the war. His influence on Eaton (Du Toit, 1989:8), Louw and others, especially their domestic architecture, is especially noteworthy (<http://www.artefacts.co.za/main/Buildings/archframes.php?archid=4415> [Accessed 12-01-2013]).

Laurence Vincent Scully (1922–2002)

Well-known art-teacher and artist, Laurence Vincent Scully was known for his abstract and semi-abstract paintings, mainly of cityscapes and landscapes. He had recommended that Eaton design the fountain for Pretoria Boys' High School, as he was the art teacher at the institution from 1951 to 1965. As an art student at Wits, he was part of a group that included Cecil Skotnes (1926–2009) and Christo Coetzee (1929–2002). In 1963, he became the first person in South Africa to be awarded a Master of Fine Arts degree (*cum laude*). Scully's subject was San influences on the work of Walter Battiss.

Like Eaton, Scully also searched for new forms of artistic expression, experimenting with shapes and textures inspired by African masks (From: http://www.soweto.co.za/html/p_scully.htm [Accessed 12-12-12]; Joyce, 1999: 232).

Jan Christiaan Smuts (1870–1950)

General Jan Christiaan Smuts was a lawyer, soldier and philosopher, who became Prime Minister of the Union of South Africa from 1919 to 1924 and again from 1939 until 1948. He was an avid and brilliant scholar, with an exceptional academic career, amongst others at Christ's college, Cambridge (1891–1894). He served in both world wars and was highly regarded by the British Government. He was also instrumental in the formation of the League of Nations.

Eaton was a supporter of Smuts. Interestingly, Eaton had designed furniture for the SA Party, which was presented to Smuts in 1934 and can be viewed in the Smuts House, Irene, Pretoria. Eaton's initial design was perhaps too modern for the tastes of the Party, and his alternative, more conservative design was manufactured and presented to Smuts (De Kock, 1968:737–758; Eaton Collection, UP Repository).

Hellmut Stauch (1910–1970)

German architect Hellmut Wilhem Ernst Stauch had arrived in South Africa in 1935. He had set up practice with Nunn from the late 1930s to early 1940s, before entering into solo practice and later founding the firm Stauch Vorster. Professor Walter Peters compares their early domestic work to the 'floating roof aesthetic of the Barcelona pavilion or the Wrightian prairie house' (1987, Jan/Feb:23–9). His domestic output was prolific: his Archives from 1943–58 list 659 of 762 commissions as houses. His contribution to the quality of residential design in Pretoria however, not only matched the quantity of houses, but also made a huge contribution towards establishing a regional ethos. Stauch admired the work of Eaton (Walters in Fisher *et al*, 1998: 175–195).

Louis Sullivan (1856–1924)

Louis Henry Sullivan was an American architect, whose eminence was based upon the refinements that he had introduced in the design of multi-storey metal-framed buildings, and upon the development of an organic theory of architecture. His Chicago skyscrapers of the 1890's reflect his sensitivity with respect to the adjustment of external detail to the rhythms and proportions of the building's structural core, the steel frame. Contrary to the implications of his most often quoted statement that 'form follows function', Sullivan used the building's material and

structural requirements as a point of departure for his creation, rather than conceiving of functional expression as a fixed goal. He had had a profound influence on his one-time employee, Frank Lloyd Wright (Jacobs in Hatje, 1971: 275–278).

Mies van der Rohe (1886–1969)

Ludwig Mies van der Rohe was a German-American architect, generally acknowledged as one of the six most influential architects working during the first half of the 20th century. The other five were Niemeyer, Wright, Gropius, Aalto and of course Le Corbusier (Gerneke in Fisher *et al*, 1998:212).

Like Le Corbusier, he had no formal training as an architect. He had worked in the offices of Peter Behrens (1868–1940), together with Walter Gropius and Le Corbusier. Mies' own work would later epitomize the International Style with rectilinear form and simplicity (Jordy in Hatje, 1971: 189–199). Eaton had met Mies during 1945 and was shown various of his projects and buildings, he commented in his diary that he found Mies's work 'precise, hard and cold ... to a degree ... not expected to find in someone like Mies van der Rohe as much as in someone like say Gropius' (Eaton's diary entry on '15/10/45', Eaton Repository).

Anton van Wouw (1862–1945)

Regarded as the father of South African sculpture, Anton van Wouw, born in the Netherlands, moved to Pretoria in 1890. Van Wouw's first public commission was for the sculpting of the old Republican coat-of-arms on the pediment of the 'new' Raadsaal on Church Square in Pretoria. As a result, he met a number of prominent architects in Pretoria, who eventually supplied him with numerous architectural commissions, such as the sculptural stucco panels for the Old Standard Bank building on Church Square, by Emley

and Scott (1894). In 1896, he was commissioned by the well-known Pretoria businessman, Sammy Marks, to proceed with the sculpting of a statue of President Paul Kruger for Pretoria. Various larger commissions followed. In 1939, he settled in Brooklyn in the home designed for him by Norman Eaton (De Kock, 1968:841–844; Eaton Collection, UP Repository).

Jan van Wijk (1926–2006)

Architect Johan Carel van Wijk, who had spent his practical student year in the offices of Eaton at the end of the 1940s, and had subsequently had an interesting career, also won the competition for the *Afrikaanse Taalmonument* (1965). Its organic forms and rich symbolism make it a landmark. Van Wijk had studied at the University of Pretoria in a class together with Gawie Fagan and the late Karel Jooste, and was the fourth graduate from the young school in 1950. He was a recipient of the Medal of Honour for Architecture by the *SA Akademie vir Wetenskap en Kuns* in 1983 (http://www.artefacts.co.za/main/Buildings/arch_bottom_left.php?archid=2810 [Accessed: 18.01.2013]).

Frank Lloyd Wright (1867–1959)

Frank Lloyd Wright, original name Frank Lincoln Wright, architect and writer, was the most abundantly creative genius of American architecture, considered as one of the six most influential architects during the first half of the 20th Century. The other five were Niemeyer, van der Rohe, Gropius, Aalto and Le Corbusier (Gerneke in Fisher *et al*, 1998:212).

After college, he became chief assistant to architect Louis Sullivan. Wright then founded his own firm and developed a style known as the *Prairie school*, which strove towards an ‘organic architecture’. Over his prolific career, he created numerous iconic buildings. In 1991, the American Institute of Architects named him the greatest American architect of all time (Source: Frank Lloyd Wright Foundation).

Norman Eaton met Wright on 13 October 1945 at Taliesen where he was a guest. The Wrights had invited Eaton to supper and showed him over the house. The following day he spent with ‘Frank’ in Chicago (Eaton 1945-diary, Eaton Collection, UP Repository).

APPENDIX C

Glossary of architectural terms

With exceptions, the following architectural term definitions, focus on the impact of various movements on residential architecture and does not necessarily deal with urban, social, institutional or related issues pertaining to respective dogmas – unless relevant to the main body of text.

Arts & Crafts

Though closely linked to the garden city idea, the Arts and Crafts movement primarily involved residential architecture. Convinced that the cultural function of craftwork is central towards an individualistic and humane approach towards architecture – therefore opposing the effects of industrialization – the movement propagated a respect for traditional methods and use of local materials. The movement began in Britain in the 1880s and quickly spread across America and the rest of Europe. Arts and Crafts established a new set of principles for living and working, advocating the reform of art at every level and across a broad social spectrum, turning the home into a work of art.

The two most influential figures were the theorist and critic John Ruskin (1819–1900) and the textile designer, activist and writer William Morris (1834–1896). While Ruskin examined the relationship between art, society, and labour, Morris put Ruskin's philosophies into practice. He placed great value on the joy of craftsmanship and the natural beauty of materials (Frampton, 1980; 1992:42–50).

Baker School

'Baker School' refers to the formal and aesthetic influence of British architect, Sir Herbert Baker, who had been a dominant force in South African architecture between 1892 to 1913 and also in the thirty years which followed his departure.

A revivalist spirit, borrowing freely from vari-

ous styles to suit circumstances (especially borrowing from the Cape Dutch tradition) typified Baker's work. In addition to attention to craftsmanship and detail, and the traditional use of materials, Greig (Greig in Beck, 1985:58) maintains:

He was the first architect to bring climatic conditions to bear on architectural design in South Africa. This, his dramatic sites, and the use of local materials, produced a rare organic unity between the buildings and their environments.

The collective term 'Baker School', coined by Professor Geoffrey Pearse, covered the work of the young architects who continued Baker's legacy after having either worked in his office or in the employment of the Department of Public Works (PWD) after the Anglo-Boer War (1899–1902) (De Beer *et al*, 2000:122–124; Fisher, 2000:46; Fransen, 1982:231; Keath, M. 1998. 'The Baker School, a continuing tradition 1902–1940', in Fisher *et al*, 1998:79–93).

Brazil Builds

In the immediate post-war period, many South African architects were turning to an unexpected source of inspiration: Brazilian modernity, which swung away from the rigid International Style. In particular, graduates from the architectural schools of the Witwatersrand and Pretoria had an affinity for this style.

The architectural press was filled with reports on Brazil – the original and most influential of them all being the 1943 publication of New York's Museum of Modern Art, entitled 'Brazil Builds' by Philip Goodwin and G.E. Kidder Smith. In 1944, the *Architectural Review* had made a brief comparison between Brazil and South Africa, two distant countries far removed from WWII (Chipkin, 1993:235). In both countries, small groups of

young architects were in contact with Le Corbusier, both groups paying close attention to his five principles of architecture. However, the visual enrichment and above all the *brise soleil* contributions from Brazil, soon infiltrated the South African architectural scene. The latter was already tempered by regional mutations that eased the acceptance of Transvaal architects of the Brazilian influence – especially as had already been proliferated by Eaton in Pretoria with his regional approach (Gerneke in Fisher *et al*, 1998: 211). While Hellmut Stauch was much indebted to the Brazilian influence and had indeed also visited Niemeyer (during 1948), it was Eaton from the Pretoria crowd who had had the first opportunity to meet the *maestro*.

A study tour (1945) was organized to the Americas to research the latest in office layout and design, following Eaton's commission in 1944 to design the ambitious Ministry of Transport building (but was never executed). The design was the first South African one in the Modern idiom for a civic client and the first to be influenced directly by the new Brazilian architecture (De Beer, 2000:110). Besides the use of the unfamiliar term 'Ministry', the scheme owed much to the Ministry of Health and Education (1936–1943), Rio de Janeiro, Brazil, designed by a team composed of Lucio Costa, along with Oscar Niemeyer, and several others. This group invited Le Corbusier to oversee the project, which was designed in 1935 to 1936. Eaton's scheme showed parallels with that of the Ministry of Health and Education in 'the juxtaposition of wings, the facades with fins on a grid and adjustable *brise soleil* and the sculptured lift towers' (Gerneke in Fisher *et al* 1998:212–3).

Beyond the influencing Eaton's work following WWII, the Brazilian appellation had a huge following in the architectural fraternity and expanded to all southern African architecture of the 1950s and 1960s.

'Brazil Builds' influences are especially evident in buildings explicitly displaying sun penetration with exaggerated louvers, *brise soleil* and egg-crate sun-guards, roof gardens in the Marx idiom and sinuous lines. The first built example was Hellmut Stauch's Meat Board Building, Pretoria (1952) (Gerneke in Fisher *et al* 1998:197–231; De Beer, 2000:109–110; http://www.artefacts.co.za/main/Buildings/style_det.php?styleid=70 [Accessed: 12-11-12]).

Cape Dutch

Cape Dutch architecture predominated in the Western Cape during the 17th to 18th centuries. It is arguably South Africa's only internationally recognized architectural style, and was systematized by Baker according to various gable types; houses in this style were distinguished through ornately scrolled gables, reminiscent of features in townhouses of Dutch style. Houses took on letter-type plans, with the front section of the house usually flanked by two wings running perpendicular to it. Walls were whitewashed, roofs thatched, and sash windows with external shutters typified the style (Biermann in Beck, 1985: 57; Fisher, 2000:45; Pearse, 1933; Trotter, 1899).

CIAM

CIAM, the *Congrès internationaux d'architecture moderne* [International Congresses of Modern Architecture] was an organization founded in 1928. The incentive came from Héléne de Mandrot (1867–1948), a patron of the arts, who hosted the event at her castle at La Sarraz in Switzerland after consultation with Le Corbusier and Swiss historian Sigfried Gideon (1888–1968). Responsible for a series of events and congresses arranged around the world by the most prominent architects of the time, with the objective of spreading the principles of the Modern Movement, CIAM was eventually disbanded in 1959. CIAM was not only engaged in

formalizing the architectural principles of the Modern Movement, but also saw architecture as an economic and social tool that could be used to improve the world through design, with rationalization and standardization being the most effective forms of production (Reyner Banham in Hatje, 1971:70–71; Joubert, 1999:7–8).

Critical Regionalism (also see 'Regionalism')

Critical Regionalism is one of many regionalist positions that are part of a pluralistic attitude considered endemic to postmodern theory. The term 'Critical Regionalism' was first coined by theorists Alexander Tzonis (b.1937) and Liane Lefaivre (b. unknown) in 1981 and later adopted by the architectural critic and historian Kenneth Frampton. The latter described the term as denoting a resistance to universal dogmas and opposed dominant power, alluding to a hybrid system that combined traditional craft and modern technology in architecture.

However, the original definition put forward by Tzonis and Lefaivre, distinguishes regionalist architecture from critical regionalist architecture, denoting 'critical' architecture as being concerned with identity of the particular rather than the universal. The addition of the term 'critical' implied that such architecture had to be critical of both universal dogmas and revivalist approaches (Barker, 2012:110–111; Canizaro, 2007:16).

Expressionism (1910–1925)

Expressionist architecture is a variant of Modern architecture, but was never strictly a cohesive architectural movement. It became synonymous with the treatment of architecture as a display of creative energy, as individual works of art, with freeform curves and planes. Form was generally dominant over tectonics, with a common lack of geometric order in composition. It had developed in Europe during the first decades of the 20th century, propagated by amongst

others, architects Bruno Taut (1880–1938) and Erich Mendelsohn.

Expressionist forms were disseminated in South Africa *via* Rex Martienssen in the early thirties. The style was characterized by an adoption of novel materials, formal innovation, and unusual massing, sometimes inspired by natural forms and the new technical possibilities offered by mass production of brick, steel and especially glass.

Following the design of the *Einstein Observatory*, Potsdam (1921), considered to be the epitome of Expressionism, Mendelsohn started to reconsider arbitrary poetic license – especially in light of the adoption of primary geometric form as the embodiment of modern architecture as propagated by CIAM (Chipkin, 1993:13; Frampton, 1980; 1992:116–122; Vittorio Gregotti in Hatje, 1971:92–98; Joubert, 1999:202–203).

Functionalism

Centered around the dictum 'form follows function', coined by Sullivan, Functionalism is a Twentieth Century movement that advocated that a building should reflect directly its purpose in shape and in planning. An extension of rationalist philosophy, it was arguably the most contentious aspect of modern architecture while also being its academic origin. Inevitably, the practical aspects of architecture have always been an overriding consideration in the realization of any built structure (Joubert, 1999:5).

According to British architectural couple Alison (1928–1993) and Peter Smithson (1923–2003) (Smithson, 1981:70):

In the 1930s ... something called functionalism superseded all the separate and distinctive flavours of the heroic period. By functionalism was meant the abolition of ornament and the abandoning of pitched roofs and the Orders. The stylistic void thus cre-

ated was somehow to be filled by function and sociology. In this way, a rejection of style ... and misrepresentation ... came to represent Modern Architecture to a generation who never really knew what the original excitement was all about.

The International Style

The term 'International Style' was coined as a designation of the Modern Movement aesthetic after it was used by Henry-Russell Hitchcock (1903–1987) and Philip C. Johnson (1906–2005) for their book entitled *The International Style: architecture since 1922* (New York, 1932).

The book appeared while the exhibition entitled 'Modern Architecture: International Exhibition' was in preparation at the Museum of Modern Art (MoMA), New York under directorship of Alfred H. Barr (1902–1981) during 1932 (Barr had also written the introduction to the book). It is characterized by an emphasis on volume, space enclosed by thin planes or smooth surfaces instead of a suggestion of mass and solidity; regularity and an underlying orderliness; dependence on the intrinsic qualities of the materials, technical perfection and rigid proportions.

McIntosh is generally considered the earliest exponent of the International Style in the Transvaal with the execution of House Munro, Pretoria, 1932. (Cooke in Beck, 1985:60; Fisher, 1997:70; Khan, 2001; Paul, Jürgen. 2003. 'Henry-Russell Hitchcock (1903–1987) Philip Johnson (b.1906) The International Style: architecture since 1922, New York, 1932'. *Architectural Theory from the Renaissance to the present*. Italy: Taschen. 2003:714–720).

Johannesburg Vernacular

There are two different references to a 'Johannesburg Vernacular' in South African architectural history:

- The first appearance refers to the neoclassical approach to design with substantial references to Perret, as manifested in Johannesburg from 1947 to 1962 in a series of educational buildings. Architectural historian Sir Nicholas Pevsner (1902–1983) later called this endemic architectural expression the 'Johannesburg Vernacular' in the June 1956 issue of the *Architectural Review* (Prinsloo, 1993:32).
- The second 'Johannesburg Vernacular' is described by Chipkin as referring to the domestic vernacular architecture that developed in Johannesburg suburbs during the 1950s to 1970s, with a seminal post-Bauhaus component and mainly influenced through the dissemination from the work of Norman Eaton (Chipkin, 1993:294–304; Fisher, 1998:125).

Johannesburg Vernacular: Institutional (1947 to 1965)

Following the end of the first Modern Movement in South Africa, the destruction of the Le Corbusian regime was almost completed with the 1947 'Art of Architecture' Exhibition where Vitruvian ideals were hailed along with the embracing of historical architecture over a wide spectrum, including several stripped neoclassical buildings and Brazilian decorative tiling (Cooke in Fisher *et al*, 1998:232). Participants in the exhibition included a number of prominent architects, who had been at the centre of the first wave of the Modern Movement, but now rejected it, in particular Hanson, McIntosh and Fassler.

Together with Kantorowich, they formed a loose group who developed principles of a revised post-war position. The group developed a 'scientific' design procedure to resolve design problems: significantly resulting in new ground rules as 'first principles' to reform architecture. These first principles included amongst others local, durable use of materials and greater care in detailing

of services – traits that Eaton had been applying for years, and with which Fassler and his group had been familiar (Cooke in Fisher *et al*, 1998:233–234).

By 1948, two new buildings were completed that demonstrated the shift in thinking, namely the Medical building by Norman Hanson and John Fassler's Dental School, both in Johannesburg. Both showed their new technical position and the new acceptance of historical form and decoration. The John Moffat Building (1954–1959) and Geology Block (1960–1962) were a merger between the Modern Movement and influences from Perret, with repetitive modular elements, modulated wall panels, windows surrounded with fillet moldings, roof cornice and play of surface texture of monumental proportions (Chipkin, 1993:77–80, 188–189, 271–274).

The neo-classical approach to design as especially propagated by Fassler, with substantial referencing to Perret, contributed to what architectural historian Sir Nicholas Pevsner later called 'The Johannesburg Vernacular' in the June 1956 issue of the *Architectural Review* (Prinsloo, 1993:32).

However, another 'palace revolution' was looming. The September 1962 exhibition and Manifesto by Witwatersrand architecture students, called for an architecture that could represent social reform, a new realism, that would reject formalism and challenge neoclassicism (Prinsloo, 1993:35–36). Similar to the actions of the *zero hour* (sic) group thirty years previously, exhibition material was sent to the Smithsons, Aldo van Eyck and others (*ibid.*:37).

From 1965 onwards, there was a steady merging of activities between the student group and architects returning from post-graduation studies elsewhere, resulting in the formation of the Urban Action Group to intervene in architecture and city affairs, shifting architectural direction (Prinsloo, 1993:38).

Johannesburg Vernacular: Residential (1950s to 1970s)

According to Chipkin, a large number of diverse architectural influences came together to form a new domestic architecture in the Johannesburg suburbs from 1950 to 1960. Besides a seminal post-Bauhaus influence, Scandinavian references and Brazilian infusions, the most persuasive source was the work of Norman Eaton (Chipkin, 1993:294).

The Johannesburg Vernacular was typified by cross ventilation houses, simple evocative materials, glazed sliding doors opening onto unroofed exterior patio rooms, bagged brick or exposed clinker brick, red or dark quarry tile paving laid in square patterns or brick stretcher bond, built-in ledges, low technology houses with low profile galvanized steel roofs and open-brick screens (Chipkin, 1993:295).

Chipkin (2008:379) gives a description of the Johannesburg vernacular architects:

Examples of personal contact with the Pretoria School are Paul van Bruggen, who had worked in Eaton's office ... and Jack Clinton who worked at a formative stage as part of Stauch's practice in Pretoria and Neutra's office in California. André Hendrikz, the designer of a classic Highveld type house had close associations with Eaton and was the recipient of Eaton patrimony in the form of two doors from Zanzibar. Hendrikz's house in Melrose North literally sparkles – sending out showers of sparks as in a short story by Katherine Mansfield.

There are other designers who showed familiarity with the Pretoria School but were one step removed and were working with separate but parallel agendas. This group included Donald Turgell, where Eaton brick screens were transformed into chevron and lozenge shapes – influenced by his stay in the Magreb

in North Africa, to produce what Turgell called his Park-Moorish style suitable for Parkmore. And Mannie Feldman, a collector of African sculpture and steeped in Afro-centric sentiment as well. In addition: Sike Margoles, a designer who came out of John Shunn's office with deep love and understanding of natural materials; and Michael Sutton in his early work.

There was a third category of architects like Wim Swaan and Maurice Kaplan (a neighbour of Wibo Zwart) who were seduced not only by Brazil but by the pictorial qualities of indigenous homesteads, as re-discovered by Barrie Biermann and Betty Spence in their seminal portrayal of Ndebele architecture in the English *Architectural Review* (1954) – an issue that inspired many imaginations including that of Johannesburg born Philadelphia architect Denise Scott Brown, if only in the excitement of discovery that characterizes her work and in her deep Africa nostalgia. Wibo Zwart's distinctive kraal houses, I suspect, were influenced by the Pretoria regionalists as well as by the Pearlman family's Roodepoort Brickworks, rough semi-face commons and clinker brick in blues and plums – a brick much favoured by a generation of Johannesburg vernacular architects, whereas the resident Philadelphia School generally favoured the more precise biscuit iron spots used by Eaton.

Modern architecture

'Modern architecture' is a generic denotation that applies to architectural manifestations not derived from any historical precedent. Strictly speaking, its inception can be traced from the *Art Nouveau* in 1872 and concluded with the dissolution of the CIAM in 1959 (Joubert, 1999:14).

Modern Movement: Internationally

The Modern Movement was a global reinvention of the underlying credo of architecture, with various derivatives, in order to generate an appropriate language for the materials of industrialization. It became official with the founding of the *Bauhaus* (1919–1933) under the leadership of Walter Gropius, while Le Corbusier became its chief advocate (Fisher, 1997:70).

The **first Modern Movement** was the most dogmatic in its approach to the pressing issues of the time, especially against the stagnant use of tradition. The Smithsons (1981) considered the first or 'heroic' period of the movement to be from **1917 to 1933**, tracing it to the inception of the *De Stijl* in 1917 and concluded with the cinema *De Handelsblad-Cineac*, Amsterdam, by Johannes Duiker (1890–1935) in 1934, along with the closing of the *Bauhaus* in 1933. The heroic period was one of idealism, embracing the advances of new technologies and culminating in Le Corbusier's 'house as a machine' (1923) metaphor and his 'five points for a new architecture' (1926).

The **second period** of the **Modern Movement** extended between the two World Wars from 1930 to 1939. An unprecedented political interference during the early 1930s in all fields of creative expression by both Joseph Stalin (1878–1953) and Adolf Hitler (1889–1945) dampened the initial fervor of a unifying architectural language and caused the foremost advocates to leave Europe (Joubert, 1999:7; Gerneke in Fisher *et al*, 1998:198).

St. John Wilson argues that 'another tradition of Modern architecture' was already formed after the strict orthodoxy propagated by the CIAM conference of 1928, influenced by climate, topography and tradition – the latter especially exemplified in the work of Alvar Aalto (St. John Wilson, 2007:15). Even Le Corbusier modified his own modernist vocabulary from 1930 on-

wards, showing a patent respect for place, climate and materials. The mediation of modernity and tradition directed much of the architecture of the third period of the Modern Movement (Barker, 2012:81–83; Joubert, 1999:7).

The **third period of the Modern Movement** followed after WWII: a period of physical, social and economic reconstruction. The CIAM conference of 1947 shifted its attention from earlier abstract functionality and its idealism towards the need to create an environment that could meet the material and emotional needs of society (De Beer *et al*, 2000:96).

In Europe and the United States, a second generation of modern architects ultimately displayed their disenchantment with the utopian rhetoric of their predecessors. Team10, created at the 1953 CIAM IX Congress, produced a schism within CIAM by challenging its doctrinaire approach to especially urbanism, and in 1959, the CIAM was dissolved.

While a transition had already started to take shape in the work of Aalto since the 1930s in a regionally and or nationally mediated canon of the Modern Movement, the major shift to a regionally tempered modern architecture occurred outside of Europe. In South America (especially in Brazil) and South Africa, relatively isolated from WWII, a unique architecture had developed that blended the local and the global: International Style architecture with traditional, regional, cultural and climatic considerations, creating a **third period of the Modern Movement globally** and instigating a **second wave of the Modern Movement locally** (Barker, 2012:84; Gerneke in Fisher *et al*, 1998: 197–229).

Modern Movement in South Africa: First Wave (1925–1942)

In South Africa, the Modern Movement played out differently to its European counterpart – the

result of a series of contributing factors:

According to Herbert (1969:26), the publication of ‘The Modern Movement in South Africa’ (Furner, SAAR, Dec 1925:87–89) in 1925 was a seminal piece for the future of architecture as it expressed a clear understanding of the logic and philosophy of modernity, steering clear of issues of style. From the early thirties, Martienssen pioneered the influence of a ‘transitory modernity’ on domestic architecture (Barker, 2012:77). His direct contact with Le Corbusier paved the way for the distillation of Modern Movement tenets mainly in the Transvaal. Together with McIntosh and Hanson, he forged an allegiance that led to the publication of *zero hour* (sic) in 1933, which was amongst others sent to Le Corbusier. The maestro dedicated his 1937-publication *Oeuvre Complète (1919–1929)* (Le Corbusier and Jeanerret, 1943) to the Transvaal Group, including a letter he had addressed to Martienssen and his fellow pioneers.

The *Bauhaus* influence and the idea of a total environment of modern design captivated the young scions of the Modern Movement, and in the 1930s a small number of houses inspired by Gropius, but mostly Le Corbusier, were built in South Africa. The **Munro House** in Brooklyn, Pretoria by McIntosh (1932) was the first modern house to be published in the SAAR, June 1932, inspired by especially Gropius. **House Stern** (1934–1935), Johannesburg, by Martienssen, Fassler & Cooke, explicitly showed the theoretical framework of Martienssen and the building’s resolution of complex sculptural form marks it as a major local interpretation of the International Style. Among Norman Hanson’s early works was **Hotpoint House** (1934) in Johannesburg. Herbert (1975:137) maintained that the building ‘was the first major South African building authentically in the modern idiom to appear in the pages of any South African publication’.

Martienssen’s own house in Greenside, Jo-

Johannesburg (1939–1940) was a seminal work, which has become the symbol of the shifts and changes of the adaptation of the Modern Movement in South Africa. References in the house include Le Corbusier, compositional influences from Fernand Léger (1881–1955), Renaissance frontality, Guiseppi Terragni (1904–1943) and Wassily Kandinsky (1866–1944) (Prinsloo in Beck, 1985:59). The house became a prescribed Johannesburg post-war vocabulary (Chipkin, 2008:95).

However, WWII caused a discontinuity in the pursuit of the ideals set forth by the Transvaal Group, and, along with Martienssen's sudden death in 1942, marked the end of the inherited orthodox Modern Movement in South Africa (Barker, 2012:79; Cooke, 1988:19; Chipkin, 1993; Chipkin, 2008; De Beer *et al*, 2000:102–109, 112–118; Herbert, 1975).

Modern Movement in South Africa: Second Wave (1942 to mid-sixties)

In 1942, the same year Martienssen passed away, a letter by Roy Kantorowich (1916–?) was published in the SAAR, which attacked the urban ideas of both Le Corbusier and Wright, accusing them of authoritarianism and even Fascism. The letter caused a debate for months to follow (Cooke in Fisher *et al*, 1998:232).

By 1945, technical problems were becoming apparent in the 1930s modern buildings. Besides the fact that the general public did not favour the new architecture (Herbert, 1975:230), criticism was strengthened by observations that pre-war buildings designed by architects such as Eaton, Cowin and Stauch, who used facebrick, pitched roofs and wide eaves, had lasted very well. Among many criticisms leveled at pre-War Modern architecture, Kantorowich maintained that plans from the Transvaal Group Modern Movement, had been valued for aesthetic graphic quality rather than for functional appropriateness. He

also held the view that the Corbusian spatial system resulted in wasted and awkward spaces (Barker, 2012:72,99; Cooke, 1993:23).

As a result of the criticism of the first South African Modern Movement, many South African architects were turning to unexpected sources of inspiration in the immediate post-war period. One small group turned to neoclassicist, rationalist, Perret-inspired revisions of the Modern; and another, to Brazilian modernity, which had a more prevailing and extensive influence (see entries 'Johannesburg Vernacular (1947–1965)' and 'Brazil Builds' respectively).

The development of a third Modern Movement in South Africa, as hybrid between the Modern Movement canon and local circumstances, also followed the war. While the 'Art of Architecture' exhibition of 1947 at Wits displayed a dichotomy of architectural directions, there was evidence of an emerging tendency that began to mediate the Modern Movement through recognition of place and materials. On the authority of Barker (2012:87):

This has been referred to variously as a 'contemporary vernacular' of the Transvaal (Fassler, 1956:177), 'Transvaal Vernacular' (Fassler, 1957: 2), 'vernacular traditionalism' (Cooke, 2003:24) and a 'Third Vernacular' (Fisher, 1998:123).

Douglas Cowin was possibly the first architect in Johannesburg to pursue a regional ethos by merging modern requirements with place-specific responses as early as 1936.

In Pretoria, the work of Norman Eaton, who had inherited a regional nationalist approach from amongst others Leith and Moerdyk, reflected a particular response to nature and landscape through the economical use of naturally available and industrially produced materials with a pragmatic response to climate. Together with

McIntosh, Cole Bowen and Stauch, he represented the 'Third Vernacular' or Pretoria Regionalism (see entry 'The Third Vernacular').

Second-generation influences were especially carried on in the work of Jooste in Pretoria, Fagan in the Western Cape; and in Johannesburg, a second generation of various architects used Eaton as primary source to develop what Chipkin later referred to as the 'Johannesburg Vernacular' (see entry 'Johannesburg Vernacular (1950s – 1970s)').

Pretoria Regionalism

See 'The Third Vernacular'.

Regionalism

Regionalism was 'the empirical offshoot of the Modern Movement' (Fisher, 1997:70). Fisher's explanation of the term is that while it accepted

... modernist tenets such as Functionalist planning and Purist aesthetic and an honest expression of the use of new materials of the Twentieth Century, namely steel, glass and ferro-concrete, it was stylistically a tempered version of the aesthetic and by being place-specific, not linked to the International Style (*ibid.*).

Fisher continued to summarize the term as follows:

Each region would manifest its own interpretation since the aesthetic was guided by:

- An acknowledgement of the constraints of prevailing climate with the requisite devices of shading and sun control, hence dispensing, for instance, with the flat roof and 'taut skin' facades
- An employment of the skills of local craftsmanship as sacrifice to the crisp styling of the machine aesthetic

- The use of traditional materials, so encouraging an innovative use of what was locally available to mimic the performance of industrially produced materials
- A sensitivity to the characteristics of the existing landscape and a response to site-specific topography, hence creating earth-bound buildings as opposed to white boxes freed from the ground by *pilotis* (concrete stilts or pylons) (*ibid.*).

Romantic Nationalism

According to Fisher (2000:50), the term derives

from J. Roosval in J. Kidder Smith, where he is quoted as saying that Ragnar Östbergs City Hall is 'the ripe, late fruit of national romanticism'. In an attempt to slip the yoke of Imperialism, those South African architects who searched for a national architectural idiom cast their eyes to the architectures of northern Europe. Their work thus shows diverse stylistic influences, but central to their endeavour is an expression of the use of local material and decorative devices. There is usually an underlying classicism, thus sometimes the use of classical elements, although often in modern guise.

In Sweden, the revival of National Romanticism was part of the movement that became known as 'New Empiricism' where it had two objectives: to improve functional performance of modern building and to make it more 'human' (Cooke, 1993:26).

The Third Vernacular

Fisher coined the 'Third Vernacular' after Doreen Greig's (b. 1943) definitions for 'first' and 'second' South African vernaculars. If a tradition of a particular architectural expression becomes endemic it may be termed as a 'vernacular', as had

been the case with Pretoria Regionalism.

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

Fisher indicates that the prerequisites for a regional ethos were all present in Pretoria during the 1940s and 1950s. Building Controls from 1941 to 1946 restricted imported materials and together with limitations on construction technologies, architects had to improvise. A rich diversity of local building materials were readily available (such as thatch, slate and brick), and combined with the fact that Pretoria clients were often not financially proficient, more innovative uses of local materials were pursued (Fisher *et al*, 1998: 123–140).

The establishment of the first Afrikaans School of Architecture in 1943 at the University of Pretoria also contributed to the formation of a Pretoria vernacular. Prof Meiring, the first head of the newly established school, had appointed amongst others Eaton, Cole Bowen and Stauch as lecturers, resulting in a pragmatic architectural education and the fostering of a regional bias (Barker, 2012:100).

The links of the professional chain from Baker-Leith-Eaton-Jooste and contributions of Stauch and Cole Bowen were paramount in the establishment of the tradition, but Eaton 'remains as one of the most important representatives of the Pretoria Regionalists' (Fisher *et al*, 1998:123).

The Transvaal Group

Le Group Transvaal [The Transvaal Group] was

the name used by Le Corbusier to refer to the group of young like-minded protagonists, most notably McIntosh and Hanson under the leadership of Martienssen, who in the 1930s were striving to introduce the Modern Movement into South Africa and who were particularly inclined to follow Corb's lead (Cooke, 1988:17).

See the description for 'Modern Movement in South Africa'.

Streamline Moderne

'Streamline *Moderne*' refers to a late branch of the *Art Deco* that was considered to be 'Modernistic', a word pejoratively used by purists whose work was 'Modern'. Although both 'Modern' and 'Modernistic' are superficially defined by curving forms, long horizontal lines, and the *Art Deco* often by nautical elements (such as railings and porthole windows); the true Modern purist does not 'apply' these elements as mere aesthetic devices (Chipkin, 2008:71,95).

zero hour

Rex Martienssen pioneered a group of fellow enthusiasts for the South African Modern Movement, initially calling themselves the *Alpha Club* (1932), which was based at the University of the Witwatersrand. The club was later replaced by the so-called *zero hour* (sic) group in December 1932. Their ideal was 'to create a living architecture in South Africa', outlining a functional design bias (Herbert, 1975:95). They published a single but historic edition of their manifesto, also called *zero hour*, in April 1933 and copies were sent to Le Corbusier and also all the major overseas journals. Their manifesto was dedicated to Prof. Geoffrey Pearse (Gerneke in Fisher *et al*, 1998:209; http://www.artefacts.co.za/main/Buildings/style_det.php?styleid=225 [Accessed 12-10-2012]).

APPENDIX D

Extracts from examiner's report and student's response

Summary: A note on Eaton's drawings

Drawing execution and the relationship to the actual design content were noted under individual project descriptions in this chapter, including an overview of how his drawing execution differed per architectural period prior to each section. Although the focus of this study lies in the content of the drawings and their translation into built form, it is worth giving a brief overview of the method and execution.

The vast majority of the drawings that form Eaton's Collection were done in his own hand, immediately recognizable from his handwriting in annotations and his distinct signature.

The changes in methods of execution of his drawings were a direct reflection of his maturing design approach over time – an initial response to the purist Modern Movement and later as response to Wright's organic architecture (In this context, 'organic' refers to Wright's architectural philosophy that ascribes to an architecture that 'grows' from the earth – with emphasis on horizontality, low-pitched roofs, low binding walls and planter boxes towards an architecture of integration with the site).

- After having studied so many of the drawings in his Repository, the researcher was able to recognize his unique drawing style(s) which changed over the course of his career. While Eaton's student work was predominantly executed as pencil drawings and water colours (typical of the time – as seen in the 1930s SAAR publications), his earliest sketch plan drawings in practice are predominantly in HB-pencils or black pen. He economically limited so-called 'preliminary sketchplans' (sic) to a single A3, A2 or A1 page per project. Whereas

his earliest drawings are disciplined, they are also elaborate, textured and descriptive, expressing a sense of warmth and humanity.

- Despite the broader context not being included in the early drawings, trees and human figures are always part of the immediate surroundings depicted on drawings. However, when he briefly succumbed to the Modern Movement, he used two distinct styles to execute his drawings (these two drawing styles are purposefully juxtaposed on pp.38, 44, and 48 respectively):
 - one which includes textures, wall reliefs, surrounding trees, human figures, and a little of the immediate landscape beyond;
 - and one that is a cleaner, extremely crisp replica of the first with *sans serif* charette-like typeface in the Bauhaus idiom. This was typical of the Modern Movement drawings of the time, and is described in detail in footnote 11 on page 37. Typical of the Modern Movement, designs were part of an international language that was rendered as a-contextual pavilions.
- Following this interlude of the Modern Movement, we notice an increasing influence of Wright in his designs – a more organic architectural approach – also evidenced in the method of execution of his drawings, often drawn in exactly the same style as those of Wright – not surprising, as someone as sensitive as Eaton, who also had a love for the 'wholeness' of nature would be drawn closer to the idea of an 'organic' architecture as opposed to the idea of a 'machine for living'. The increase of landscape elements depicted in his drawings can therefore be ascribed directly to the growing influence of Wright in his work – also clear in his design approach which is increasingly horizontal in nature (specifically illustrated in Figures 4 and 5, p.19).

Yet, this influence can also be ascribed to his frame of reference, which included constant encounters with the work of Pierneef, which had had a profound influence on him. As a result, leading up to and during the war years, all his drawings carefully map the landscaping, trees, shrubs and any features of the surroundings and his response thereto. Drawings are more grainy and expressive, with larger expansive textured horizontal fields.

- By 1948, Eaton had visited Wright in America, and had also been to Wright's offices, house and had visited projects such as the Robie House (see Figure 13 which is of his diary entry of visiting the Robie House on 17/10/45). The likeness in Eaton's execution of drawings of the subsequent Greenwood and Anderssen houses to those of Wright cannot be denied.
- Like the drawings of his peers Cole-Bowen and Stauch, Eaton used the modular grid as a design discipline underlying his drawings in the post-war period. The modular grid derived from standardized windows, would form the basis for his designs as evidenced in his drawings dating from 1948 onwards. It was also something that Wright had used to discipline his designs. While the grid was the result of standardized planning and had economic advantages, it had the added benefit of creating visual focus and disciplined composition of facades. Here, we see for the first time that the grid had some influence as a drawing device to order design.
- The sinuous binding wall, used for the first time in the Greenwood House (design started August 1948) was probably a distillation of the Brazilian organic line found to be compatible with African qualities. This line is masterly executed by Eaton in his drawings following his visit to South America. Stauch also fell victim to the seduction of the Brazilian sinuous line, as demonstrated in the execution of his drawings (see motif sheets 7 and 11, pp. 138 and 142 respectively).
- After 1959, Eaton discarded the sinuous line and started employing controlled geometrical forms in relation to each other to articulate and offset spaces. The reason for this, to the researcher's mind is not so much an issue of execution of drawing method, as the fact that these forms have a stronger affinity with the African architectural vocabulary. In addition, it is more economical to build geometrically – a consideration that might have been central to this shift in formal response.
- Construction drawings of only a few residential projects are part of the Eaton Collection. These were executed exquisitely, with great precision and with special attention to detail – and mostly by Eaton himself. While a scribe was used for the annotations on some (which makes it difficult to establish ownership), Eaton wrote the annotations on those of the Greenwood and Anderssen Houses in the same pen that the drawings were executed. The difference in the *finesse* of detailing from the 1939 Anderssen House drawings and that of House Connell O'C Maggs could possibly be ascribed to the meticulousness of Schmickl as a draughtsman in his employ at the time.
- Of note is the wording of annotations that often reveal something of the draughtsman. Besides ever-present, though nuanced, classical references in Eaton's later work, a small and perhaps insignificant piece of forensic evidence of his early influence prevails in his use of the word *loggia* (along with *verandah* or *stoep*) throughout his career – a term derived from the Italian Renaissance.

4. CONTENT:

The structure of analysis and critique is academically sound, follows logically from the research intentions and is further enhanced by the contextualisation to other related architectures. The content unpacks the formal nature of the investigation and highlights typologies in Eaton's work. The following are detailed questions or comments about content, presentation and structure. The internal examiner's suggested amendments are indicated alongside.

1) Should drawings not be described with associated metadata	Supervisor to determine whether this is necessary
2) Is there a discernible difference in Eaton's references to Baker and Leith (I note some Baker references such as Westminster). Similarly was the Arts and Crafts influence through Baker or was it already localised through the Cape or through Leith? I note some similarities in his work to the Diocesan College buildings.	Possible interview question or to be researched in further studies
3) The descriptions and discussions are formally biased and little mention is made of the influence of actual physical place (besides climate).	I suggest the delimitation be defined
4) A clearer description of the relationship of building and landscape will help to understand any shifts over time (for example the house on p.48 house with long balcony, one door and rooms facing with windows only).	Possible interview question or to be researched in further studies
5) Eaton's early drawings seem to be quite acontextual? Any reason for this?	Possible interview question or to be researched in further studies
6) Any concept drawings in Eaton's' diaries that show exploration of form/plan as generator? Can one rely on only one Eaton diagram to base an assumption of plan as generator?	Possible interview question or to be researched in further studies
7) In line with the idea of plan as a formal device, what about the section?	I suggest the delimitation be defined
8) The student mentions that Eaton uses organic for country and Modern for city - how would you classify the Little Theatre in Pretoria?	Possible interview question or to be researched in further studies
9) Brief mention is made of his childhood on a Cape farm - any other influences - other life pursuits - was he an artist, sculptor?	Possible interview question or to be researched in further studies
10) As the dissertation focuses on documentation was there any discernible change in the way drawings were completed during his life? I note more site definition after 1938.	Possible interview question or to be researched in further studies
11) What was the influence of partners or staff in his practice besides Smikl?	Possible interview question or to be researched in further studies
12) What were the effects of technology on overall form making (much is said about detail). I note changes in roof pitch depending on materials.	Possible interview question or to be researched in further studies.
13) Was there a specific moment when Eaton began to synthesize Modern Movement organization with Arts and Crafts, African or Cape layouts?	Possible interview question or to be researched in further studies

Question 1: Supervisor to kindly advise.

Question 2: Eaton's master-mentor, Leith had worked in Baker's offices and had indeed been the first Baker Scholarship recipient. Through Leith, Eaton developed an appreciation for Baker. To my mind, the limited reference to Baker in Eaton's work in practice was indirect. (Interestingly enough however, his entry to the Rome Scholarship was a personal interpretation of the buildings which Baker and Lutyens had designed for the capital city of New Delhi.)

The courses offered at the School of Architecture at Wits during the 1920s, where Leith was also a lecturer, laid considerable stress upon a 'healthy respect for the indigenous scene, for the Cape Dutch heritage, and for the attempts of Baker to establish a South African architecture' (Herbert, G. Sans title. SAAR, Feb 1967: 27). Working on Pearse's book on Cape Dutch architecture, Eaton developed a deep appreciation for what he called 'the mysteries of the Cape Dutch achievement' (Harrop-Allin, 1975:22).

Of the years spent in Leith's office, Eaton later made specific reference to the strong Italian Renaissance influence and character of the work.

The deeper connections between Baker-Leith-Eaton are definitely worth further studies.

Questions 3, 4 and 5: Formal analysis was a first tool to 'read' Eaton's work. It transpired that the formal transformation of Eaton's work over time was (amongst others) as a result of his altered attitude to the landscape/physical place. Once I had arranged the body of work chronologically, I started to recognize key moments in formal change to the diagram of the plan. I wanted to see why his formal response changed over time – which became increasingly visible as I placed the work in chronology – and while I constructed the biography to link formal motif to his biography, travels and so on, I also repeat-

edly revisited the full body of work and extracted his response to landscape/site separately, followed by an extraction of encounters with Africa. A way in which I could reveal the critical moments, was through the visual distillation on pp 161 to 164. The visual distillation tells us at a glance how the plan configuration changed over time, and in the column to the far right, it shows us how the attitude of Eaton's work changed in relation to the landscape over time. The defined outside perimeter is quite confined at first, but over time, it increases and ultimately becomes the mediator between man-made and nature.

Up until roughly 1938–9, most of the drawings reveal limited clues about the full extent of their respective sites, besides the site boundaries (if a site plan were included), sometimes including existent trees, and roads or other restricting aspects. Designs from this period tended to be more vertical in articulation, which is an important observation in relation to the idea of landscape and man's response to landscape.

Designs from his first architectural period also tended to be articulated with podium-like brick (or stone) plinths, and along with various other features, reinforced and heralded verticality in composition. Eaton also employed the letter-type and centralized prism type plans the most during his early design period. At this point, his Italian Renaissance, Greco-Roman classicism exposure is still fresh, combined with the 'new architecture' of the Modern Movement, which embodies pavilion-like architectural formal devices, often removed from the ground plane (Eaton never employed *piloti* to raise his buildings, but the plinth and overall verticality of his early work suggest an attitude sympathetic with the ideas of the Modern Movement). Cape Dutch architectural influences are amongst others about the 'ordering' of man's presence in the landscape. The formality of the letter-type plan builds a stronger relationship between man-made and

nature, the symmetrical composition of a Cape Dutch facade for example, holds its own against the imposing mountainous backdrops of the Western Cape (see p 20).

Over time, Eaton's documentation of place (site) becomes more complex and his formal responses 'returned to the earth'. The reasons why are explained in the text of the main document (refer specifically to pp. 15–16). As a result of Eaton's increasing Wrightian sympathies which entailed an unselfconscious search for an ideal relationship with nature and place, his drawings also became **gradually more contextual**.

The transition from vertical to horizontal was gradual, and is especially evident in the work of the later 1930s – where the 'tail' motif is employed not only as a site binding aspect, but also as mediator with the landscape. While the 'head' at first continued the verticality of the 'pavilion', Eaton gradually started to respond more to the landscape so that the relationship with the landscape becomes more intimate. Transitional moments are for example captured in the descriptions of House Fischer (1938) and the earlier Borckenhagen House (1936).

See the descriptions of Houses Eybers (1940), Van der Merwe (1940), Warren (1941), Greenwood (1949–1953), Bosch (1961), Moolman (1961), Scully (1962) and Van den Berg (1964), where I tried to explain the particular responses to the surrounding landscape. In the description of House Greenwood and Anderssen (1949–50), I gave a detailed analysis of his 'opening' up of not only the living area, but also bedrooms, to the landscape beyond (admittedly the example of p. 48 could have been elaborated more on, especially since the formal response was most probably as a result of the views that Eaton had most probably responded to towards the Union Buildings). The detailed descriptions of the formal response to the specifics of site, landscape, place and materiality of House Greenwood and

Anderssen (and to an extent House Van den Berg), exemplify Eaton's ultimate expression in response to landscape and place. See pp. 97–109.

See pp. 127–130, and pp. 161–164, as well as p.170 for the resultant overviews of the changed formal response in relation to the landscape.

I also tried to give the reader a sense of the spirit of place and also the topography and natural landscape unique to Pretoria in part 2.2.1 of the document in order to set the scene – also to explain the layout of the grid of the city on garden city principles. Refer to pp. 170 and 172 for a conclusion on Eaton's oeuvre in relation to landscape. Ultimately, Eaton's use of material, standardization and resultant ordering devices captured the essence of the 'wholeness' (Eaton, 1960:16) as manifest in the natural order inherent in the landscape of Africa and the Transvaal.

Questions 5, 6, 7, 10: Please refer to my answers in the previous section.

Question 8: *(I can't find where in the document I made this statement – I would have liked to contextualize this. I'm sure I meant 'traditional' for country and 'modern' for city!)*

I suspect this answer has a lot to do with the definition of 'organic' – either as organic form (sinuous lines, plasticity) or organic as referred to by Wright (an architecture that 'grows' from the earth).

The Little Theatre is less formal than many of Eaton's other public urban buildings, such as the Land Bank buildings and the Netherlands' Bank buildings – all of which are placed on podiums, with symmetrical or formally ordered facades.

At first glance, the original diagram of the Little Theatre (completed between the mid-1940s and early 1950s), compellingly recalls the plan of the Masai manyatta as sketched in his 1944 Kenya

diary. Similar to the manyatta, edges of his building fall away to roundness. A vertical, undulating brick screen cuts across the site in a series of semi-circular geometrical curves of varying dimension (the original wall was broken down to make room for development of the site and was supposed to be rebuilt – unfortunately the new wall was not done as the Eaton-original). Series of brick screens grilles articulate the envelope of the complex. Functions are expressed in rigid form contrasted with the sinuous wall, while the solidity of structure is also contrasted with the porosity of the screens. Space is thus defined between organic and rectangular form, between African expression and Western standardization. The notion of juxtaposition was a design device that was also used by Aalto in his work, who regarded the duality as a symbolic gesture. The sinuous binding wall, used for the first time in the Greenwood House (design started August 1948) was probably a distillation of the Brazilian organic line found to be compatible with African qualities. The Little Theatre is therefore a good example of the combination of modern formal devices and African plasticity.

Question 9: Eaton was keenly interested in the arts, books, the theatre, music and archaeology. The latter is pertinently mentioned in the text – he did not seek out the new, modern cutting-edge architectural pieces in Europe (like Martienssen did), he spent months measuring and documenting the historical Baths at Ostia. He also spent some time admiring and photo documenting the art and architecture of Ancient Egypt. Along with his photo journals, this confirms his affinity for archeology. His close friend Preller mentions all these pursuits in the touching foreword to the 1975 publication on Eaton's work by Harrop-Allin (1975:10). Eaton made lists of everything in his diaries: where he had been on his travels, he included various lists of art works he had seen

at museums or galleries, there are also several references to the theatre and a detailed list of his books and their exact positions on his book shelves.

He loved the natural landscape. He was great friends with the landscape artist Pierneef, had lived at Pierneef's house Die Kraal for a short period (and had bequeathed a large amount of money to the Pierneefs in his testament).

His greatest interest was Africa, and he was an avid collector of vases, doors, African pottery and sculpture. He had bequeathed his collection of Zanzibar doors to De Sanderez following his death. As mentioned in the text, besides his mentorship from Leith, his friendships with Pierneef, van Wouw and especially Preller were very important in the shaping of his designer's mind.

Question 11: Although Meiring, Louw, Fair and various others were associated with Eaton in practice, Eaton liked to work on his own. This is most definitely the tone of his diaries and you get the impression that he did not appreciate interference. The point was readily confirmed by Meiring who had said that 'I was joint architect with him, and very soon discovered that you either left Eaton alone to get on with the job of designing ... or else ran the risk of a serious blow-up' (Harrop-Allin, 1975: 90). Although Eaton admired Schmickl's abilities in detailing, I am quite sure that he would not have given him too much reign in any of the design aspects (This aspect will be explored in follow-up research).

Question 12: The shortages of material and skills during the Second World War period had had a direct influence on design outcomes – refer to the section on the war period, specifically p. 84. The use of thatch for example resulted in attenuated plans etc.

Iscor started to produce steel products locally after 1936, resulting in the availability of stand-

ardized steel windows. The modular grid derived from standardized windows, would form the basis for Eaton's overall designs as evidenced in all his drawings dating from 1948 onwards.

Question 13: These moments were noted in the text (Chapter 3) and summarized in the visual distillation, and aspects thereof in the typological lineage – but maybe that was a bit small! In chronological order, these capture important **moments in his oeuvre:**

Nigel Housing typology (1933): Synthesis of comfort and informality of the Arts and Crafts plan with the formal geometries of Modern Architecture.

House Van Wouw (1937–8): Amalgamation of 'National Romanticism' and Arts and Crafts

Cottage Teichman (1940): *Rondawelhuis:* Cape Dutch, Arts and Crafts meets Africa – house as village – perpetuated in almost all of the houses from the period 1941–1945.

House van der Merwe (1940): First conscious attempt to evoke African **texture** in his domestic work.

House Greenwood (1948): First time that Wrightian modern meets Brazil meets Africa

Houses Bosch (1961) and Courtyard house/Moolman (1961): First overall African formal synthesis with interconnected spatial links, modern architecture, pure geometrical forms and textures, brick carpets, local materials