

## **ERRATUM**

Erratum for 'house Biermann in Durban: A case of "regional vernacular" in the modern architectural heritage of South Africa' by Bodei and Harber (2022).

In Bodei and Harber (2022), there was few errors in author's biography.

Silvia BODEI (bodeis@ukzn.ac.za; silbocs@yahoo.com) is an architect (IUAV, Venice) and doctor in Architecture (UPC, Barcelona). She is currently **Senior Lecturer at UKZN in Durban** (**South Africa**). She has authored several research papers and publications on modern architecture, industrial heritage and Italian, Spanish and South African architecture and urban design.

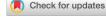
The correct Author bio should be:

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# REFERENCE

Bodei, S., & Harber, R. (2022). House Biermann in Durban: A case of "regional vernacular" in the modern architectural heritage of South Africa. *Curator: The Museum Journal*, 65(3), 603–621. https://doi.org/10.1111/cura.12510

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#### **ARTICLE**

# House Biermann in Durban: A Case of "Regional Vernacular" in the Modern Architectural Heritage of South Africa

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Silvia BODEI, School of Built Environment and Development Studies, University of KwaZulu-Natal, Durban, South Africa. Emails: bodeis@ukzn.ac.za; silbocs@yahoo.com Abstract In September 2020, the South African Institute of Architects KwaZulu-Natal Regional Heritage Committee launched an urgent national and international appeal to support the preservation of an important architectural artifact: the house of Barrie Biermann in Durban. The building, considered the most significant project carried out by the South African architect and academic, is today in danger of being demolished. Built in 1962 with great economy in the residential district of Westridge, it represents Biermann's particular vision of modern architecture and was a compelling experiment in domestic space. The present article reconstructs, through a selection of archival materials and pictures from the Technical Reference Library (University of KwaZulu-Natal, Durban), the context and design ideas of the project and some construction features. These aspects, in particular related to Biermann's architectural vision and references, highlight the vital need to protect this heritage of modern architecture in the context of South Africa.

#### INTRODUCTION

The architect Barrie Biermann (1924–1991), a well-known scholar and discerning and erudite academic, built only a few buildings in his life (Polwarth, 1994). The first and most significant project was his private home at 38 Glenwood Drive in Durban, where he spent most of his life.

Built in 1962 on a low budget on sloping grounds located in the Westridge residential area of Durban, the house is beautifully integrated into the sub-tropical topography and vegetation and remains an important testimony to his vision of architecture. This is a vision that has its roots in Modernism, but at the same time is influenced by South African indigenous, historical architecture

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Rodney HARBER (rodneyharber@mweb.co.za) is an architect, urban & regional planner, and heritage practitioner, and was trained at the UKZN in Durban, before teaching there for nearly 40 years. Biermann was one of his influential teachers. His work has been exhibited and he presented over one hundred papers worldwide, on subjects ranging from developmental architecture to settlements.

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and fully aware of its sub-tropical climate, which Biermann defined as 'regional vernacular' (Biermann, 1985). It is an expression that reflects concepts and ideas about architecture in his publications and lectures at the University of Natal, which have nurtured generations of architects in Durban and South Africa. In comments about the house and the limited means used for its construction, Biermann asserts it as a real theoretical manifesto, specifying that:

within imposed limitation, there is nearly always enough choice in the disposition of elements that will allow for an efficient 'theory of architecture': harmony and contrast. In this context 'theory' is best understood not as an abstract system but as a union of factual experiences that creates good results. (Biermann, 1985, p. 46)

Today, in 2022, the condition of the house is precarious, so much so that the building is at risk of being demolished. This article aims to draw attention to this artifact and to the prevailing problems by retracing the salient aspects and reasons for the formal choices, as well as the particular and rich vision that generated them.

# **BARRIE BIERMANN ARCHITECT AND SCHOLAR**

The cover of the *Natal Institute of Architects Journal (NIA)* published in April 1992 as a tribute to Barrie Biermann after his death on 29 March 1991, featured a collage by the painter and Biermann's friend, Andrew Verster. The drawing shows an African landscape with the Egyptian pyramids in the background and the face of a person watching the scene (probably Barrie Biermann himself). Verster, evoking the personality and interests of this important South African architect, scholar, and educator, described his collage with the following words: 'The African scene is landscape which spans centuries and continents. The allusions are puzzling, intriguing, amusing and contradictory. At the edge, a man is watching. His expression does not betray his thoughts' (Verster, 1992, p. 1).

In the essay published in the same issue, Verster defined Biermann as a 'prophet and a mission-ary' with knowledge and interest in 'the African Landscape', and at the same time interested in an architecture 'which span centuries and continents' from Venice to Durban, from the vernacular architecture in South Africa to the architectures of ancient Greece and Michelangelo's Laurentian Library in Florence (1992, p. 8). Indeed, Biermann, thanks to the mastery and proficiency fuelled by his studies and travels in Africa, Europe, and America, had the ability to create visionary linkages between places and architectures of all times.

In a previous article published in the NIA journal in 1991, Hans Hallen, a key architect in Durban from the 1960s to the 1980s, added a further reflection on the figure of Biermann – defining him 'as the successor to' Rex Martienssen, the architect and pioneer of Modernism in South Africa in the 1930s (Hallen, 1991, p. 9; Herbert, 1975). Hallen writes: 'Since the death of Dr Rex Martienssen, South African architecture has needed a man of scholarship to fulfil the cultural need we have for heroes of myth and legend. Biermann seemed a natural successor for this role, for he knew well the decline into schism and rigidity that brought the Modern Movement ...' (1991, p. 9). The thinking

of Biermann was in continuity with the Modern Movement, but also represented a particular vision of architecture, characterized by a continuous tension between tradition and modernity, past and present, which influenced a generation of architects in Durban and South Africa.

An academic at the University of Natal in Durban between 1952 and 1989, Biermann carried out research and regularly published articles and essays on a variety of themes, including Cape Dutch architecture (the topic of his doctoral thesis), South African indigenous Zulu architecture, traditional mud buildings, colonial architecture in the Cape, Ancient Greek architecture, and modern architecture in Brazil and South Africa (Biermann, 1947, 1950, 1952, 1961, 1977; Figure 1). He was a skilled draftsman capable of capturing details and images from the most varied contexts in his drawings. These are preserved at the Technical Reference Library (UKZN, Durban) and are precious testimonies to his interests. In his notes, thoughts and lessons, there is revealed his distinctive way of reading modern architecture and evidence of his deep research on traditional and ancient buildings, details, and landscapes.

## THE PROJECT OF HOUSE BIERMANN AS A THEORETICAL MANIFESTO

The house was built in 1962 on a site of about 1.100 m<sup>2</sup>, in which there was already a small domestic building and a garage, located in the residential area of Westridge in the Berea, an area on the west side of Durban looking away from the city centre (Figure 2). With a small budget, he constructed a building of about 230 m, integrated into the sub-tropical topography and vegetation. For cost savings, the orientation of the house was defined by tracing the west-east axis of the existing building, in such a way as to reuse part of the walls and foundations, while in the new walls, in cement bagged bricks, decorative elements obtained from other demolished buildings were inserted. The construction, articulated around a central courtyard facing north-west, follows the sloping topography of the land, resting on it and creating a single storey building sloping down to three levels connected by a continuous mono-pitch roof. On the level of the main entrance are the living room and kitchen, on the intermediate level a bedroom with bathroom, shower area and Biermann's studio, and on the lower level, closing the internal courtyard, a bedroom, a study, a bathroom overlooking a veranda and the rear garden (Figures 3 and 4). The squared set of volumes is connected by the conical volume of the bathroom, located near the veranda, and by a series of curvilinear walls in plan, which follow the topography and define the courtyard on the south-west side. The building is completed by a small independent volume located in the lower part of the garden facing north-west, created by renovating the garage of the previous building and used by Biermann to host friends, students, and architectural scholars.

In 1985 Biermann published the only article dedicated to this building for the magazine *UIA International Architects*, in which he analytically describes the theoretical principles used in the design, which also reflect his more general vision of architecture. In the text he defines the house with these synthetic words: "Old style modern design + economic necessity = regional vernacular" (Biermann, 1985, p. 46). He declares in his project that he refers to the architectural features of modern

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**Figure 1.** Biermann's sketches on vernacular architecture in Kloof, Durban.Technical Reference Library, University of KwaZulu-Natal, Durban, South Africa (TRL). [Color figure can be viewed at wileyonlinelibrary.com]

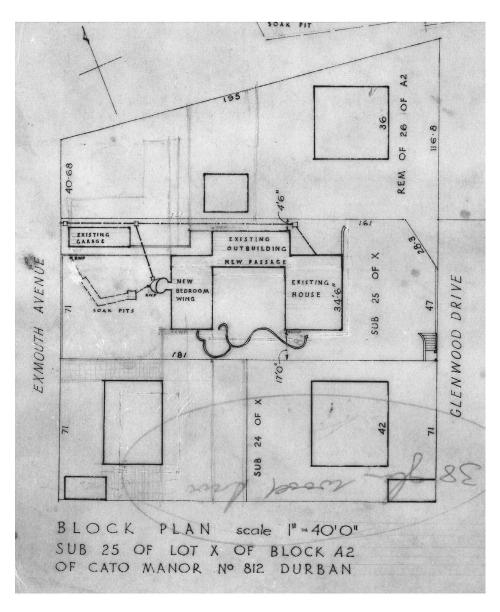


Figure 2. House Biermann, site plan. TRL.

architecture, but with the intention of reinterpreting and overcoming it to create what he defines as a "regional vernacular" architecture, that is linked to tradition and to the place where it stands. The economy of means and the context of Durban are therefore important starting point for the project and an opportunity to find pertinent architectural solutions and to create eclectic and original compositions. Biermann critically explains that 'design becomes increasingly an impersonal process, and necessity replaces whim in determining the resultant form. This does not have to detract from the



Figure 3. House Biermann, plan and long section. TRL. [Color figure can be viewed at wileyonlinelibrary.com]



Figure 4. House Biermann, facades. TRL. [Color figure can be viewed at wileyonlinelibrary.com]

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quality of the end result. As much skill is involved in making appropriate choice from a limited range ...' (1985, p. 46). Finding suitable architectural solutions that do not refer to an exclusively formal and abstract world but that are confronted with concrete economic limits and construction elements, is a central aspect of his architecture.

In his article Biermann goes on to define the architecture he designed from the theoretical point of view through six fundamental elements: planning, surfaces, space and mass, light, definition, materials. The listed aspects incorporate fundamental themes of architectural composition and principles of modern architecture, which Biermann revisits by applying them in his own personal way.

The 'planning' refers to the decision to use a plan with a courtyard, which he defines as a system articulated on directions and solutions in 'continuous contrast' (p. 46). Among these, in particular, the paths, arriving from different directions, and the alternation of full and empty volumes are indicated. The internal courtyard represents the central space of the entire composition, accessible from the house through both internal and external paths and unifies the circulation of the three wings that form the building, creating a strong connection with the topography and the surrounding subtropical vegetation, which characterizes the entire city of Durban. The idea of continuity in Le Corbusier's 'architectural promenade' is somehow questioned here with the creation of a centripetal space, but is also ambiguous because it is interrupted by various and discontinuous paths. The use of brick in the flooring and walls creates 'a system of proportions' and becomes the ordering principle of this not always linear space.

The 'surfaces' are then defined, taking up an important theme for modern architecture, as an essential and autonomous element of the building which, however, stands out in the Biermann house for the particularity of the 'tones, colors and textures' of the walls, floors, and skylights, established during the construction phase also based on cost savings. Biermann explains that 'space' must always prevail over the 'mass' of the building to create an 'architecture of self-effacement'. This means that the content is mainly designed and the building must 'dematerialize' to give importance to spatiality and what it creates inside, between the walls and the architectural elements. Mentioning Le Corbusier, it is specified that the presence of 'light' as a design material contributes significantly to this purpose, which defines surfaces in a harmonious way and is modulated by the openings, whose 'main function remains' in any case 'ventilation' (p. 46). The Le Corbusierian continuous glazing of the living room and the skylights intersect for this purpose with decorative interventions given by colored glass, mosaics inserted in the small indentations in the bricks and the screening of the veranda made of recycled cast-iron elements.

Biermann ends his discourse by mentioning the work of Frank Lloyd Wright to emphasize how it is necessary to '[exploit] the nature of material in detail design. There is no call here for preconceived forms to be imposed on the material: it assumes the forms generated by its manufacture' (p. 46).

The six programmatic points just analyzed define an idea of architecture in which the constructive technical solutions have their own importance in the project alongside the theoretical principles and help to create a work that is coherent and in tune with the whole and the outside.

## **BUILDING CONSTRUCTION**

Outstanding theoreticians are frequently less adept when faced with construction. The earliest record of Biermann's work is his B Arch, graduate dissertation, submitted at UCT in 1948 (Biermann, 1948). This was that institution's first written dissertation on record for that examination, and it was passed with Distinction. It exhibits a mature understanding of the subject, which was good 'native' housing in a township called Vlakfontein. The appreciation of cultural layers in his dissertation is enlightening, even by today's standards, but the Appendix, at the conclusion, is relevant here. To cope with the proven demand for housing, it depicts a sophisticated, prefabricated proposal, but constructed in modules for infinite variety, rather than the currently prevailing monotonous layouts. The house walls are hollow, for insulation.

It is interesting that in his own home, built about 15 years after this, Biermann made use of a new product, Corocell bricks, launched for economic housing on the outskirts of Durban (Figure 5). These deeply pressed, molded bricks had been developed for the low-cost housing market. Unusually, these bricks were laid on their edge with a large cavity left between two bricks for economy. Corocell bricks proved to be unpopular with the occupants because the resulting wall was weaker. The thin-walled, cellular nature of the bricks also meant that they were virtually impossible to cut on site, as they would shatter. Thus it was difficult to knock through openings and to enlarge houses built of Corocell bricks. In addition, user rejection was socially motivated because the larger exposed top face of the brick was noticeable, and so expressed a 'poor man's house'.

Biermann probably acquired these bricks at a reduced price, hence a pragmatic reason to pursue the cavity wall solution, put forward in his thesis. The size of the brick is in proportion to the width of the hand that picks it up, lays it onto the bed of mortar, and points it with the trowel, which is held in the other hand. Dimensions of bricks are therefore remarkably consistent between all cultures and countries, so he was able to use these cheaper bricks, in place of conventional bricks. This uniformity made it possible for Biermann to start building the house onto the walls of the building that previously existed on the site.

In the document mentioned previously, published by Biermann in the *UIA International Architects* (Biermann, 1985) he specifies that 'the reuse of existing buildings in a design gives an air of inevitability and is economically advantageous'. Accordingly, he built the vertical outer walls of the new house directly onto these existing walls. However, the new brickwork was bagged and painted white to express each brick individually and so remains clearly visible to this day. The new internal walls, which are free flowing and even curved upwards in places, thereby break free of the orthogonal limitations This is emphasized because they never reach the dominant slope of the roof overhead.

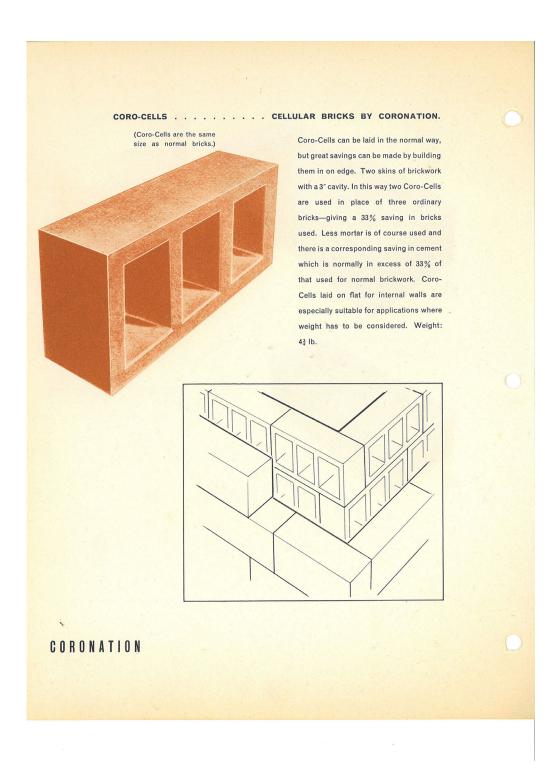


Figure 5. Coro-cell bricks catalogue (1960s), Corobrick Archive. [Color figure can be viewed at wileyonlinelibrary.com]

Furthermore, the constraints of not being able to cut a Corocell 'brick' were accepted, so that only whole bricks were used, resulting in 'basket-weave' patterns in which each brick is expressed individually, especially on tight curves.

The new interior walls are corbelled in places to support work surfaces and give rise to the tight, interior circulation. This has resulted, for example, in the cooking area being hidden behind a riot of curves, while still carefully crafted to accommodate actual functions and to dictate circulation patterns. When welcoming guests, Biermann would stand to either side in the small space, to direct guests into the living or dining areas.

Outside the entrance, Biermann illustrated the potential of Corocell by placing them on edge, as originally intended, but unusually reversed to expose their deeply set cellular frogs outward to form strong shadows, thereby emphasizing the main entrance of the house and adding contrast to the patterns of the delicate wrought-iron, laid overhead (Figure 6).

When building the garden walls, the contractor, Jan Mellema, stated that Biermann's ideas were impossible to construct in brickwork. Upon hearing this, Biermann apparently enquired if Mellema had an apprentice starting that day. Fortunately, he did, and so the young apprentice was tasked with constructing the deeply articulated lines of the garden walls (Figure 7). These innovative walls swirl down one side of the house to screen the courtyard from the neighboring property and were originally planted with large-leafed subtropical vegetation. To challenge the age-old tradition of squared off brickwork, the garden beds sometimes curved steeply downwards to form, for instance, a tight conversation space, or to accommodate a dovecote. A thorough break with convention comes when walls lean right over in places.

The same outer-exposed brick faces were used for paving the level interior floors and apparently polished with bees' wax. They were reversed in places to leave cavities to be filled in to celebrate built in mementos such as coins. The bricks were used externally for paving, but more creatively, to form fan-like or swirling patterns, hugging the undulating contours of the earth, and even ramped up in places to restrain banks.

The concrete roof was simply constructed of precast beams with hollow concrete blocks between, the so-called 'beam and block' system, which required minimal formwork and creates a flat ceiling surface below. This was merely bagged and painted to retain an image of the construction system. Thereafter a thin slab is cast over the block to take the compression loads. This orthogonal system suited the original squared outer walls. Although the waterproofing layer shows evidence of bitumastic paint, the original layer, applied by Biermann, was traditional: a concoction of lime and animal fat (heated on site in a 200 L drum) was applied. The smooth finish obtained ensured that rainwater drained off quickly.

In a comment about African homesteads, Biermann noted in his BArch dissertation that the 'lapa' (outside space located in front of the dwelling) was the 'living room', and the covered space behind was used for sleeping or in poor weather (Biermann, 1948). It may be argued that the plan of



Figure 6. House Biermann, picture of the main entrance. TRL.

his house is sensitive to this and shows a transitional solution, because his contemporary living area is fully open to the courtyard (Figures 8 and 9). The sliding glass panels between had minimal surrounds and, he once recounted, had not been shut for years.

One of the principles quoted above states: 'Light: manipulate the placing of openings, whose primary function is ventilation' (1985, p. 44). To achieve this, Biermann simply omitted the precast blocks in parts of the roof and inserted rooflights. For example, at the highest point of the raking ceiling a gap has been left at the top for hot air to escape. This is covered with an orange Perspex sheet as an added feature to attract attention to the raking plane of the ceiling above the freestanding walls. Other wall openings have deeply chamfered reveals to display colored glass or a distorted view of the garden outside. This results in an entirely new elevational expression with no traditional windows, all lined up. All doors were raised, fielded, and paneled with materials gleaned from local demolishers' yards.

The sub-tropical climate of Durban makes fireplaces unusual in homes. Biermann clearly enjoyed staring into flames, whether it was meat on a traditional 'braai' or the soporific effect of flames, dancing in an internal fireplace. Traditional Cape Dutch styled cottages have their fireplaces protruding beyond an outer wall to avoid the chimney interfering with the roof. A similar device has been used on Biermann's house, where a fireplace is corbelled out in brickwork, with the added advantage that ash could be extracted from the outside.

Biermann explains that 'the Modern predilection for 'found objects' imbues every piece of scrap with the quality of the material' (1985, p. 44). He had coins and medallions built into walls as a reminder of



 $\textbf{Figure 7.} \ \ \text{House Biermann, picture of the garden walls.} \\ \textbf{TRL.}$ 



**Figure 8.** House Biermann, view of the garden to the living room. TRL (Picture by Alan Cameron, Exhibition 'Durban Architecture. Roots Growth Change', Durban Art Gallery, 1982).

past events and travels; a facemask of a colleague, dovecotes from the Cape, pieces of exquisitely colored glass and an abundance of Victorian cast iron grilles, columns and infills. The latter act as a reminder of the setting, in a formerly colonial city. These reminders stamp the final house with a deeply personal touch and emphasize the unique setting of what Biermann defined as the 'regional vernacular'.

## **HOUSE BIERMANN AS A MOSAIC OF REFERENCES**

If we walk through the house and observe some images of the building, we can recognize the aspect of 'regional vernacular' made by details and solutions where traditional and ancient architectures are interpreted in a new way through the modern language. Colin Sydney Polwarth (1994, p. 121) describes these aspects in his research on the house:

The serpentine walls twist along the south property boundary, enclosing spaces for sitting, reflecting, a place for a dovecote (a Cape Dutch feature, and therefore Renaissance feature)... The organic forms are integrated into the house as independent sculptural items... The kitchen and entrance walls emerge like modernist stalagmite formations which float ceremoniously in the internal, three-dimensional, mono-pitched lounge space; adding interest to the entrance, dining and lounge areas.



Figure 9. House Biermann, view the living room to the garden. TRL.

Drawing on a selection of original documents, Polwarth argues that the plan, the definition of the curved walls of the garden, and the elliptical volume of the bathroom are a reinterpretation of the Great Enclosure and Conical Tower of Great Zimbabwe, and the cylindrical masonry water towers of the Karoo dry landscapes in South Africa – both architectural structures studied and observed by Biermann in his notes and research (Polwarth, 1994) (Figure 10).

References to South African vernacular architecture and the integration of the house into the context are present in other elements and details. The internal courtyard and the perimeter walls are designed in such a way that the topography and vegetation are an integral part of the building and an essential element of relationship with the sub-tropical environment of Durban. Some perspective sketches of the house, made by Biermann probably already in the design phase, show a certain insistence on the importance of defining the central courtyard as the fulcrum of the building and the supporting feature of the entire structure (Figure 11). The courtyard house, however, is an atypical typology for the Durban area and has never been detected in South African indigenous architecture, it is therefore a novelty for these areas, while it incorporates typologies of Greek-Roman and Mediterranean architectures. Indeed, Biermann was familiar with Mediterranean and Greek architectures, which he had studied since his formative years (Polwarth, 1994). The principles of Greek architecture in particular had been brought to South African architecture schools starting in the 1940s, thanks to Rex Distin Martienssen (1905–1942). The pioneer of modern architecture in South Africa Martienssen produced a doctoral thesis, published after his death, entitled *The idea of space in* Greek architecture which was presented at the University of the Witwatersrand in 1941. It includes a chapter on the Greek court house (Herbert, 1975; Martienssen, 1956).



**Figure 10.** House Biermann, view of the north-west side of the house with the conical volume of the bathroom and the cast-iron sun screen in the veranda. TRL.

Biermann, who was influenced by Martienssen (Biermann, 1966; Polwarth, 1994), however, seems to find especially in Mediterranean and Portuguese architecture parallels with South African architecture. In one of his writings, Polwarth states, Biermann explains that it is possible to recognize court-like traits in the settlements built in the Karoo, a southern region of South Africa, where people need to shelter from the sun and the very arid climate (Biermann, 1961; Polwarth, 1994). The courtyard system is better suited to the reuse of the foundations of the existing building, and transforms it into a more complex structure, full of external and internal references, and also functional to the needs of the habitat.

The shape of the house, which sinuously accompanies the slope of the land, thus manages to create an open system, which guarantees adequate ventilation in the humidity of the sub-tropical climate (Biermann, 1966; Polwarth, 1994). On the north side then, adjacent to his bedroom and study, Biermann inserts four pillars, two masonry and two metal, to form a portico, a detail that again recalls the design of Mediterranean and Greek houses, with the peristyle around the courtyard, which, as Martienssen had explained 'provides expansion within a restricted space. It is a mode of extension of the domestic space' (Martienssen, 1956, p. 61).

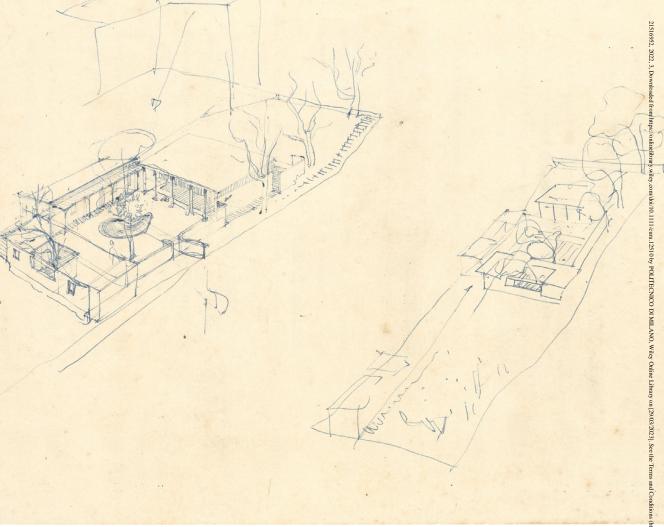


Figure 11. Sketches of the courtyard by Barrie Biermann. TRL. [Color figure can be viewed at wileyonlinelibrary. com]

As mentioned previously, Biermann then closes the house to the north-east with a veranda, used to protect the terrace and the interiors from the sun, shielded by cast-iron sun screens recycled from other buildings. This element is reminiscent of the old Victorian-style single-family houses present in Durban in the same area, even while some sections of the façade shielding are attributable to modern Brazilian architecture, established in South Africa since the 1950s that Biermann had been able to study and visit in his 1946–1947 trip (Biermann, 1944, 1950; Theron, 2008).<sup>3</sup>

A small garden created outside his studio on the north side of the house in turn links the house to the desert areas of the Karoo. Biermann called this 'my klein Karoo' (Polwarth, 1994, p. 127). This green area, which receives direct sun from the north, is made up of sloping flower beds enclosed by white walls, plastered like the rest of the house, and, at Biermann's choice, housed plants typical of this area of South Africa, resistant to heat.

Continuing the analysis, we can see many other elements that recall aspects of the Cape Dutch style, historical and even Renaissance architecture, but it is once again the theme of the vernacular that occurs most frequently, always applied in a personal and eclectic way. There were traits and aspects already present in modern architecture and addressed by masters such as Rex Martienssen and earlier by Le Corbusier, who particularly in the 1930s was experimenting in domestic architecture with solutions and materials taken from the classical and vernacular Mediterranean tradition (Curtis, 1986; von Moos, 2009). However, Biermann seems to take these choices to the extreme and House Biermann presents itself as a coherent and organic mosaic of cultural references and a collage of continuous architectural solutions.

#### CONCLUSION

Returning to the *NIA* journal issues published in April 1992 after Biermann's death, we find another article entitled 'Save Barrie's house', written by the South African architect Jack Barnett, who tried to raise public awareness about the house being in danger of abandonment:

... the fate of the Biermann house – that is, whether it is preserved or allowed to drift unimpeded onto the insensitive property market – will represent an important yardstick of the community's aesthetic maturity. It is my contention, and there are many in the profession who support this view, that the house should be bought, restored, and permanently kept as a museum for the benefit of the whole South African community. It should be furnished and landscaped as when Barrie lived in it and be opened to the public from time to time as a museum, but perhaps also have a functional role of an appropriate kind. (Barnett, 1992, p. 1)

Notwithstanding the legacy of various owners at different times after Biermann's death, and the salience and value of the house, this building is now abandoned again and at risk of demolition (Figure 12) (Peters, 2020). An important piece of architectural history stands bare and unused, bereft of its original subtropical vegetation and decorative features. It serves as a vital reminder of how an innovative and penetrating modernist design should challenge age-old building traditions.

In September 2020, the SAIA Regional KwaZulu-Natal Heritage Committee launched an urgent national and international appeal for the preservation and defense of this important architectural artifact, and currently, its members are occupied in a heritage recognition process to have the building provisionally declared (Munro, 2020).

While remaining in a vulnerable situation, the house is considered to be the most significant project carried out by Barrie Biermann. It is a small but important piece of architecture in South Africa, rooted in its context and tradition, conceived as a mosaic and collage of architectural references, which are built in a coherent and organic way. Through the study of the house, its construction and references, it is important to note that Biermann is not only a theorist, but also an architect interested in details and the solution of elements and construction problems. The combination of squared and curved volumes, the cast-iron decorative details, the brick textures of the floors, the colored skylights, the facades and the metal staircase, rich in details and expertly designed, are some of the solutions used that reflect Biermann's studies and interests that went from the past to the present, and where



**Figure 12.** Drone view of the current conditions of the house. Picture by Nhlamulo Ngobeni. [Color figure can be viewed at wileyonlinelibrary.com]

elements of the vernacular and historical architecture were 'translated', as Biermann himself use to say (Polwarth, 1994, p. 131), into solutions that recalled a personal way of conceiving architecture. The value of this artifact acquires importance because it has autonomous and peculiar features that go beyond the ideas and forms of modern architecture. The vernacular aspect, as already mentioned, taken up in particular by traditional South African architecture and by the houses of Durban Berea, is essential and defines what could be called a 'vernacular modernism' specific to its context. Underlining these characteristics of the building is essential to start a process of protection that can mark the beginning of its recognition and promotion. We do not know what the future of the house will be, but what is happening raises an important question about the preservation of a particular modern architectural heritage in South Africa, clearly part of its landscape.

# **ACKNOWLEDGMENT**

Open access funding enabled and organized by ProjektDEAL.

# NOTES

1. The date is reconstructed on the basis of documents kept at the Technical Reference Library (UKZN, Durban), but the drafting of the project began as early as 1960, the date of purchase of the project (Polwarth, 1994, p. 116).

- 2. Biermann writes: 'The hardy breed of people who built houses on the semi-desert plateau of the Karoo evolved an architecture which has much in common with that of the Mediterranean, and in fact derives from it through Portuguese sources. Despite these links with Europe, there is no more truly South African vernacular than these simple and dignified homes' (Biermann, 1961, p. 22; Polwarth, 1994, p. 129).
- 3. During a trip to Brazil Biermann carried out research entitled 'Observations on fenestration in Brazil'. A summary of this research was published in the *South African Architectural Record* in July 1950.
- 4. Among the most significant vernacular references in the Le Corbusier's work we find, for example, the vaulted ceiling taken from the Catalan tradition, which Le Corbusier used in the buildings of the Weekend House (La Celle-Saint-Cloud, France, 1934), Maisons Jaoul (Neuilly-sur-Seine, France, 1951), Villa de Madame Manorama Sarabhai (Ahmedabad, India, 1951) and the projects for Peyrissac Residence (Cherchell, Algeria, 1942), the Basilique of La Sainte-Baume (France, 1948) and Roq et Rob (Roquebrune-Cap-Martin, France, 1949) (von Moos, 2009).

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