

A typology for ‘waenhuis’ in the vernacular farm architecture of the trans-Vaal River region

Mauritz Naudé

Department of Architecture, Tshwane University of Technology, Pretoria

E-mail: maurtiz@nfi.museum

The word ‘waenhuis’ has become synonymous for what is also referred to as a ‘wagon shed.’ Eventually, the term will disappear as the building’s association with wagons becomes less obvious. At the same time ‘waenhuis’ will become relevant to museums and conservationists involved in the study and conservation of local vernacular architecture. Part of investigating these buildings is the creation of a typology to determine trends and building traditions associated with this building type. Spatial configuration and organization of the floor plan are useful criteria to create such a typology. Two basic types, single- and multi-space ‘waenhuis’ can be distinguished. Single-space buildings can be divided into ‘open-sided shelters’ and ‘waenhuis with walls’. Multi-space buildings are divided into those structures consisting of a core building with additions and those that are part of a dwelling. Material and building technique are less important criteria for a typology, but remain essential for the description of the architectural vocabulary of individual buildings.

Key words: wagon sheds, sheds, shelters, vernacular farm buildings

‘n Tipologie vir waenhuis in die landelike volksboukuns in die trans-Vaalriviergebied

Die term ‘waenhuis’ het deel van Afrikaanse volksboukuns-terminologie geword en sal mettertyd uit die volksmond verdwyn soos die assosiasie met waens vervaag. Terselfdertyd word waenhuis en die assosiasies rondom die geboutipe belangriker vir museums en bewaringskundiges wat gemoeid is met volksboukuns. Dit het gelei tot die soeke na algemene inligting oor en die saamstel van ‘n eenvoudige tipologie van waenhuis. Ruimtebenutting en konfigurasie (planvorm) is die belangrikste kriterium vir die saamstel van ‘n eenvoudige tipologie. Twee hooftepe word onderskei naamlik ‘enkelruimte waenhuis’ en ‘waenhuis met veelvuldige ruimtes’. Enkelruimte waenhuis word in wa-skuilings en toegeboorde waenhuis verdeel. Veelvuldige ruimte waenhuis word in waenhuis met aangeboude vertrekke en waenhuis wat deel is van ‘n woonhuis verdeel. In hierdie klassifisering is materiaal en bouetniek ondergeskik aan planvorm, maar nogtans essensieel vir die beskrywing van die karakter van die onderskeie geboue.

Sleutelwoorde: waenhuis, skure, skerms, volksboukuns

The Afrikaans word ‘waenhuis’ used to be a popular term in the past but is slowly disappearing among farmers as the associations with a particular building type and wagons have become irrelevant. Wagons have become redundant and have been replaced with mechanical vehicles and the ‘waenhuis’ has become a ‘garage’. ‘Waenhuis’ have not disappeared from old farmsteads altogether and fieldwork has revealed that quite a variety of these buildings still exists and suggests scope for further research regarding the building type and its associated dynamics in terms of spatial arrangement and building technology.

During the early years (since 1840) of settlement and for most of the 100 years after the first settlers established farms north of the Vaal River, ‘waenhuis’ had a significant role on farmsteads as it had to accommodate the farmers main mode of transport. Some ‘waenhuis’ were large buildings and the wagon sometimes shared space with other wagons and carts, fodder, produce and farming equipment.

A number of historic sites in the region north of the Vaal River (the former Transvaal) has been protected by heritage legislation and was developed into public open spaces where selected farming activities are practiced. On most of these farmsteads, reconstructed or restored ‘waenhuis’ form part of the display of the remaining in situ farm buildings. Although replicas have been built and existing buildings have been restored, published references regarding ‘waenhuis’ (in the old Transvaal) are almost non-existent. Restoration projects on historic sites tend to focus on the main dwelling and outbuildings (such as ‘waenhuis’) did not receive the same attention. The lack of research-based documentation on outbuildings reflects this tendency.

The lack of typological information regarding the occurrence and physical characteristics of 'waenhuis' has also impacted negatively on restoration projects undertaken by museums responsible for the management of historic farmsteads. With the reconstruction of the 'waenhuis' (in 1993) on the farm Hartebeestpoort, (Silverton, Pretoria), the question was raised whether there are ample documentary evidence available on the subject and also whether there are comparable examples in the region left to be able to draft a typology of wagon shelter types. 'Waenhuis' reconstructed at the Pioneer Museum east of Pretoria, the President Pretorius Museum in Potchefstroom and the Diepkloof Farm Museum in the Suikerbosch Nature Reserve (Heidelberg, Gauteng Province) also seem to come from the same pattern book. This raises a number of questions: Did they always look like those represented at these museums, how can one differentiate between different types and are there in fact different types?

Since the middle of the 1980s the fieldwork undertaken by the National Cultural History Museum (now known as Ditsong: National Museum of Cultural History) focused on research in the northern part of South Africa and in particular north of the Vaal River. This is a practical measure that eventually became almost an institutional policy as each of the previous four provinces had their own 'National' Museums, each focusing on their part of South Africa. Even though the fieldwork focused on the area north of the Vaal River, it remains common knowledge that white settlement in this part of the country originated from the southern regions (Cape Colony) and Natal and scholarly work had to extend into these regions.

As the (Museum-initiated) research on this topic was initiated in order to gain some insight into the occurrence of 'waenhuis' on the various historic sites curated by the Museum, it remains a logical assumption that the surrounding districts and neighbouring farms would be the first areas to be surveyed to determine whether the 'waenhuis' on the historic sites were common or exceptional in their geographic settings.

This paper merely introduces a simple typology (and probably an incomplete and temporary typology) of this building type and the discourse does not claim to argue where they originated, to draft a complete evolutionary development of the type or any other deeper theoretical or academic significances. The essay also does not claim to be a 'complete' history of the building type neither does it try to compare different sub-types that may indicate aspects associated with regional variations. The approach is 'linear' and of museological origin; identifying broad types and classifying these types into a simple (perhaps old-fashioned) typology using a selection of 'known' examples. From the available field data it became clear that ample material is available (especially the number of surviving examples on farms in the study area) to compile a larger and more extensive publication.

Motivation for the study

Within a scenario of an almost absolute lack of fieldwork research and published material regarding vernacular architecture in the region north of the Vaal River, a study of 'waenhuis' and the publication of a simple typology may be considered of little value. However, a typology still remains a point of departure for this type of work instead of departing by using a complex theoretical approach to introduce this building type to the domain of architectural history.

The study of vernacular architecture in general and vernacular buildings associated with European settlement and local architecture is not considered a priority among State funded institutions and has become a peripheral subject for study in recent years. The result is scanty evidence on the subject matter in libraries and even less useful material reaching the chapters of scholarly publications.

A general observation and possible explanation for the lack of information regarding the history of outbuildings on historic farmsteads may be because a lot of time and effort is spent on researching the social history of the former residents of old dwellings as part of the historic research process normally undertaken prior to restoration. Studies include detailed reports on the previous owners, their children and relatives, while the main dwelling is scrutinized for technical detail on building materials, building techniques and structural decay. Unfortunately, the same is not always done regarding the outbuildings on the same premises.

The principal reason for an exploratory study on 'waenhuis' has a museological origin. The information is needed for conservation, maintenance, restoration and reconstruction purposes on historic sites and at site museums. It was triggered by a number of case studies where museologists had to excavate, analyze and reconstruct the remains of 'waenhuis' at historic sites, some managed by museums and some by other conservation agencies.

One example was the reconstruction of the 'waenhuis' (figure 10) on the farm Hartebeestpoort (Silverton, Pretoria) when (in 1994) it was decided to reconstruct the 'waenhuis'.¹ It is unknown when it was demolished and by whom. The only remains visible on the surface, was a cobblestone floor of about 2,5 m by 2 m. It was assumed that it formed part of the original 'waenhuis'. This cobblestone floor was used as point of departure for an extensive archaeological excavation to expose the foundations of the original 'waenhuis'. When the detail of the excavations were recorded, what remained to be done was to combine the existing published and unpublished information on 'waenhuis' in the Transvaal with the archaeological data to create an academic reconstruction of what the building could have looked like.² It was soon realised how little information existed on the topic. The objective was to design a building that resembled the architectural characteristics of the existing (old) buildings on the site and not to simply replicate another building from a different region and era.

A second 'waenhuis' had to be reconstructed on the farm Kaalfontein (Rayton district). The current owner, the Ditsong: Museums of South Africa had to reconstruct a 'waenhuis' from the remains of the original building on a portion of the farmstead dating back to 1913. The thatched roof disintegrated completely and sections of the walls caved in. The house was restored in 1996 and the only remaining outbuilding on the farmstead was the 'waenhuis'. It is located about 50 m from the dwelling. It could not be compared to the older example as it was attached to the farm dwelling – in character and spatial organisation completely different from another.

The need of such a typology again became prevalent during an investigation of the historic outbuildings on the farm Zwartkoppies (Pretoria district). The farm is located almost halfway between the farms Hartebeestpoort and Kaalfontein. The main building on the farmstead has been restored and the outbuildings still had to be restored. The farmstead has a cart shed similar in form and style than those in Great Britain.

A number of site museums in the former Transvaal are maintained as farmsteads with the dwelling houses and outbuildings intact. The 'waenhuis' at the Diepkloof farmstead (located in the Suikerbosch Nature Reserve in the Heidelberg district, Gauteng) is a replica of a 'waenhuis' recorded on another farm in the district.³ No attempt has been made to reconstruct the original building.

Between 1978 and 1880 the Potchefstroom City Council restored the waenhuis on the farmstead of M.W. Pretorius.⁴ The farmstead is located inside the municipal boundaries of the City Council and is managed as a site museum with the homestead, stables and 'waenhuis' being the most prominent historic buildings on the site. Continuing research on the history of the site

and the different buildings and related features calls for continuous changes and alterations on the detailing of the buildings.

Between 1984 and 1990 the Town Council of Middelburg (Mpumalanga Province) restored the 'waenhuis' and stables of the main missionaries house on the mission station of Botshabelo. It is a unique double storey, unplastered stone building with stables for horses sharing the same roof. It was also the only stone 'waenhuis' on the mission station and at the time of restoration no evidence of previous 'waenhuise' existed.

The information on 'waenhuise' would have been essential to the owners and restorers of the mentioned project if they had to comply with the conservation policies for the individual projects, and which are now standard procedure to have building and restoration plans approved by the South African Heritage Resources Agency (SAHRA). Most of the examples mentioned above are located on historic farmsteads, which have been proclaimed Provincial Heritage Sites. This endorses the fact that the 'waenhuis' (as vernacular building type) has become associated with a period passed and is mainly of interest to and investigated by individuals who are interested in preserving this type of building.

Wagons, carts, carriages and coaches

Several vehicle types were used concurrently during the period 1840 to 1930. Not all of them are associated with the term 'waenhuis'. Wagons are no longer in use on farms in the northern part of South Africa. The word 'waenhuis' is a 'rare' occurrence and has to some extent become extinct. Among older folk and conservationists it remains a significant relic referring to a bygone era and to a select few it may still be a reality in their life world.

A number of terms are used to describe the space used for the storage of ox and horse drawn vehicles. The wagon, as South Africans know it, is mainly associated with the so-called ox-wagon used during the Great Trek (1836-1838) and later, after settling in the old Transvaal, for travelling long distances. The second common type of wagon was the transport wagon, which had a longer body but small canvas canopy. The 'waenhuis' is associated with the latter wagon type – also explaining the measurements of 'waenhuise'.

Published sources from around the world use different words. In *Our Vanishing Landscape*, Sloane refers to a building similar in form to our 'waenhuis', as a 'wagon shed'.⁵ In Peter's *Discovering traditional farm buildings*, he uses the term 'cart sheds' and not 'wagon sheds'.⁶ In the accompanying drawings of examples of cart sheds, the buildings depicted resemble the features of 'waenhuise' in South Africa. In Weller's *History of the Farmstead* he mentions a cart shed but also a cart lodge.⁷ In Radford's article "The carriage house and stables in South African domestic Architecture", he refers to carriage houses. In the same article he also mentions coach houses.⁸

This variety reflects more than pure dialectical differences of the same object and must be remembered when naming building types associated with the different types of vehicles. The explanation probably lies in the variety of animal-drawn vehicles known to the farmers of the different areas.

The word 'wagon' is still common in the United States of America, Britain (spelt, 'waggon') and in South Africa. The words cart, coach and carriage are also used. The dictionary defines wagons, carts, coaches and carriages in the following way: A wagon is a "four wheeled rectangular vehicle that is used to carry heavy loads and is pulled by animals, often with semi-removable circular tilt or cover."⁹ A cart is "an open horse-drawn vehicle, especially one with only two

wheels, used for carrying goods or as a farm vehicle, or a light horse-drawn carriage with two wheels.”¹⁰ The dictionary refers to a coach as a “large enclosed horse-drawn carriage.”¹¹

In South Africa the general perception of a ‘wagon’ relates to the ‘kakebeenwa’. The type of wagon used during the Great Trek with its vaulted canvas top covering the entire length of the vehicle. The second image is that of the longer transport wagon or ‘transportwa’, with or without its small vaulted ‘tent’ set right at the back. Both types were drawn by oxen, mules and in rare cases by zebra.¹² The region north of the Vaal River (formerly known as the Transvaal) has a strong tradition of using oxen instead of horses as draught animals. Farmers still refer to the wagon and not to the cart, carriage or coach as the principal means of transport in the early years. The wagon was mainly used to transport goods, whereas carts, carriages and coaches carried people and were drawn by horses.¹³

Carts are perceived as vehicles drawn by horses and are smaller in size than wagons. Some well-to-do farmers had carts but these were used for special occasions if and when the roads were in a good condition. The wagon remained the main mode of transport for longer distances going on hunting trips and to attend church services (Holy Communion), at the nearest town with a proper church.

The use of wagons did not result in a plethora of different building types. In cases where a building was erected only to be used as storage facility (parking) for a single wagon, it remained a simple rectangular building, usually with a pitched roof. Where the ‘waenhuis’ became a multiple storage facility the structure became slightly more complicated and variations in terms of materials and construction techniques are more common. The ‘waenhuis’ became the first example of the construction of buildings that were often larger than the original dwelling and became the predecessor of the large sheds and barns in which the wagon and any other farming equipment and produce were stored and eventually culminated in the large impressive and dominating (by scale and size) structures on more contemporary farmsteads. The design of wagons remained basic until they became redundant modes of transport. The first ‘waenhuis’ followed the same trend but eventually through an evolution of chronological change become more complex and ‘monumental’ over time – separate (assumingly) from the changes in transport modes.

‘Waenhuis’ on farmsteads

The focus of this paper is ‘waenhuis’ and excludes shelters and buildings associated or specifically erected for the protection of other animal drawn vehicles.

In 1900 the government of the Zuid-Afrikaansche Republiek (ZAR) was asked to participate in the International Exhibition in Paris. Several drawings were made of what was considered a typical Transvaal farmstead. The drawings included one of a ‘waenhuis’. It was a single space building with a hipped roof at one end and free gable at the other end (figure 1).

The main criterion used for the typology for ‘waenhuis’ is space utilisation and the building’s location in relation to the homestead. ‘Waenhuis’ can either be isolated buildings (outbuildings) or be part of the homestead (attached). Isolated ‘waenhuis’ are located within 80 metres of the landowner’s house and situated at the side or somewhere in the backyard.

As ‘waenhuis’ are long elongated buildings, their location and setting in relation to the local gradient of the landscape is important. Most ‘waenhuis’ are situated parallel to the contour to minimise the negative impact of the slope and needs little construction work to create a level floor surface inside the building, the same principle used for the location and siting of dwellings. The ‘waenhuis’ on the farm Doornpoort in the Pilgrims Rest district is the only

recorded example of a 'waenhuis' constructed slope-down. The entrance is set at the lowest end and the floor slopes slightly upwards (from the door).



Figure 1

Drawing of a 'waenhuis' (wagon parked inside), made for the Paris exhibition as part of the South African display of a typical Transvaal farmhouse and outbuildings (ca. 1900) (drawing: Ditsong: National Museum of Cultural History, Pretoria).

Three sets of criteria are used to determine different typologies: (a) the location or the position of the building in relation to other buildings, (b) comparing the floor plans of buildings sharing the same roof with the 'waenhuis' and (c) comparing building materials and building techniques of individual buildings. Other criteria may also be popular such as categorising 'waenhuis' according to their date of construction (the latter criteria – third and fourth - are not discussed in this paper).

The typology used in this paper sets out to combine the first two sets of criteria.¹⁴ There are broad categories of similarity and variations within these categories. Various sub-types are created by deviations in form and the use of material.

No research with proper sampling has been undertaken in a single or a random group of districts and the examples mentioned in this paper, to some extent, reflect the incidental data found in the archives and photographic collections of a number of museums.¹⁵ The bulk of the material included in this his paper was observed and compiled (over a period of twenty years) during fieldwork in various regions north of the Vaal River.

The first type includes those buildings which were isolated from the farmhouse and the second type includes those that are part of the farmhouse. At this stage it would be impossible to consider any pattern according to period, style or date of construction. Such a pattern will only emerge after a proper quantitative survey has been completed. Style elements are usually associated with embellishment and ornate detail on buildings and 'waenhuis' were seldom decorated to fit the style of the main house.

Use and size

As mentioned earlier, 'waenhuis' have lost their traditional function as safe parking facilities for wagons but they have not lost their generic function as covered and closed storage space. This ensured that they are still used, mostly in altered conditions and as core structures for a variety of additions and lean-tos added some time later.

Farm buildings tend to change in function rather than being demolished. Any building is perceived as an economic resource and therefore used continuously depending on the needs of the landowner and the technology available at the time.

When wagons were replaced with trucks and cars, ‘waenhuis’ became garages and the term ‘waenhuis’ slowly became less used. Today, former ‘waenhuis’ are used as garages and storage space for farming implements, fodder and whatever needs to be stored.

On the farm Roodepoort (Middelburg district, Mpumalnga Province), the ‘waenhuis’, which is a fine example of a dressed sandstone building, was first used as a (farm) school and later (1995) housed the owner’s (the original landowner’s son) private collection of old farming implements (figure 12). This had little impact on the building except that an old style two panel door with coloured glass at the top (associated with the front doors of dwellings between 1880 and 910) was installed at the gable end. The ‘school’ cum ‘museum’ eventually became the core building for two lean-tos added to the east. They were used as stables for calves.

Similar changes occurred on the farm Boekenhoutfontein (associated with the former President of the Zuid-Afrikaansche Republiek: Paul Kruger) in the Rustenburg (Northwest Province) district. The original ‘waenhuis’ became the local farm school. Eventually, it was decided to restore the building to the period when it was used as a farm school and not as a ‘waenhuis’.

Types

As the observations compiled in this paper were almost incidental, the study and therefore the typology (figure 2) proposed must be considered of an interim nature. It nevertheless forms a base from where future investigations can expand and from where new research objectives can depart.

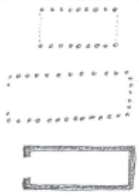

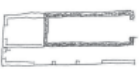
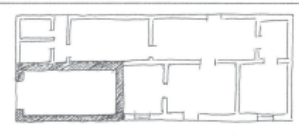
WAENHUIS TYPOLOGY			
1.		<p>Single space: timber frame roof structure and open gable ends</p> <p>with hipped thatched roof and open sides.</p> <p>with roof and closed sides</p>	Waenhuis detached (isolated) from the farm dwelling.
2.		<p>Multiple space waenhuis with lean-to along the gable.</p> <p>Multiple space waenhuis with lean-to along the side elevation.</p>	Waenhuis detached (isolated) from the farm dwelling.
3.		Multiple space waenhuis with additional 'rooms' along the gable end and along the side(s).	Waenhuis detached (isolated) from the farm dwelling.
4.			<p>Waenhuis as part of the floor plan of the dwelling.</p> <p>Waenhuis attached to the farm dwelling</p>

Figure 2

Typology of ‘waenhuis’ types according to spatial arrangement and floor plans (drawing: M. Naudé).

The first category (1) is referred to as ‘single space’ ‘waenhuis’ as these buildings only consist of a single covered space without any subdivisions or additions to the floor plan. Three main sub types can be distinguished: (a) timber frame roof structures reaching down to the ground, (b) timber frame structures with well-defined roofs but with open sides and (c) walled buildings constructed with a variety of materials. The second category (2) is referred to as ‘multiple space’ ‘waenhuis’. The first sub category consists of single space ‘waenhuis’ with lean-tos and spaces added to the core building. Still within the ‘multiple space’ category are those ‘waenhuis’ with additional spaces (3) constructed on any of the sides of the core building or with subdivisions inside the core building. A unique category (4) had to be created to include those ‘waenhuis’ that have become part of the dwelling. In this instance they share the same floor plan and sometimes also the same roof structure.







Building form	Characteristics
	'Kapstyl' type shelter with timber frame and open gable ends
	Vault type shelter with timber frame and open gable ends
	Gable roof shelter with open sides
	Single space building with single entrance in gable
	Gable multi-space Building with entrances in gables
	Dwelling with 'waenhuis' attached

Figure 3
‘Waenhuis’ types – simple typology based on elevations (drawing: M. Naudé).

The isolated ‘waenhuis’

The isolated ‘waenhuis’ functions separate from other buildings and can be classified as an ‘outbuilding’. On some farms it remained a single-space building but on some the ‘waenhuis’ forms only a core and has been extended to accommodate other spaces and uses. The core with additions sometimes become large buildings reminding one of the barns found on farmsteads in the United States of America and in Europe. These large buildings become entities in their own right and the absolute domain of the farmer and his workers (in the same way the dwelling would be the principal building for the housewife). The building is seldom used by the landowner’s wife as it does not accommodate any related household activities but the use focuses on the large scale storage of produce and activities traditionally associated with the men.



Figure 4
Small farm dwelling with ‘waenhuis’ set at the back and slightly to the side (left) of the dwelling
– Waterberg, ca. 1890 (photograph: Gross Collection, Ditsong: National Museum of Cultural History, Pretoria).

While the pioneers were on trek, the wagon was their home and most valued possession. It was their only means of transporting their belongings. It was also used as a mobile shelter and sheets of canvas were usually tied to the sides to create a ‘lean-to’ while camping. The wagon was usually the core of such a temporary settlement or camp¹⁶ and additional space necessary for other activities such as sleeping, sitting and food preparation were located at the periphery of the central core. Sometimes one or more tents were pitched next to the wagon.

During the first months of settlement on newly acquired land, priorities switched. More time and effort went into the construction of a ‘kraal’ for the protection of cattle and stock and erecting a temporary dwelling for the family. Such a temporary dwelling could consist of one or two rooms constructed of organic materials such as clay, reeds, timber and grass. Protecting livestock and people became the first priority and the wagon became marginalised. It was often left, parked under a large tree to shade it from sun and rain.

Unfortunately, little could be done to prevent white ants attacking the wheels and penetrating the rest of the vehicle. Simpson¹⁷, a government entomologist in the early twentieth century, reported that it was a common custom when a wagon is not used for some time, to raise the wheels by placing stones underneath. This gave some guarantee of safeguarding the wheels against termites.

It seems as if a shelter for the wagon ranked low on the construction priority list. It was only erected after completion of a temporary house and a cattle kraal (constructed with branches as a ‘takkraal’).¹⁸ This was probably one of the reasons why the ‘waenhuis’ became an outbuilding and (in isolated cases), were only incorporated under the same roof as the homestead. The reason for this being that during ‘trekking’ and hunting the maintenance of the wagon and livestock enjoyed priority. These activities were the responsibility of the males in the family. As soon as the family has been provided with a shelter, the construction of more permanent structures became priority, also the responsibility of the males. For the time being the wagon became of lesser importance and was left isolated from the household and dwelling.

The first structures were mere shelters constructed of timber and thatch. Similar looking structures can still be found in the Waterberg region (Limpopo Province). They do not necessarily date back to the days of the pioneer settlers but were constructed in the 20th century, presumably according to the same principles and with the same materials as those constructed in the previous century. Although isolated, the ‘waenhuis’ was often located within 50 metres from the farmhouse or within walking distance of the back door of the main dwelling.



Figure 5

Hipped roof shelter with cut-back roof at the entrance to allow a transport wagon to enter the building - Waterberg region, ca. 1986 (photograph: Ditsong: National Museum of Cultural History, Pretoria)

On some farms, isolated ‘waenhuis’ were constructed to the side of the homestead but were visible from the front stoep (as on the farms Brandbach, Bronkhorstpruit district and Roodepoort, Middelburg district). Otherwise it was located at the side and the backyard. The position of the building and its entrance were not dictated by existing roads as was the case of coach houses in urban areas.¹⁹ Isolated ‘waenhuis’ (outbuildings) can typologically be divided into two broad types: those built as ‘single-space’ structures and those that are ‘multi-spaced’.

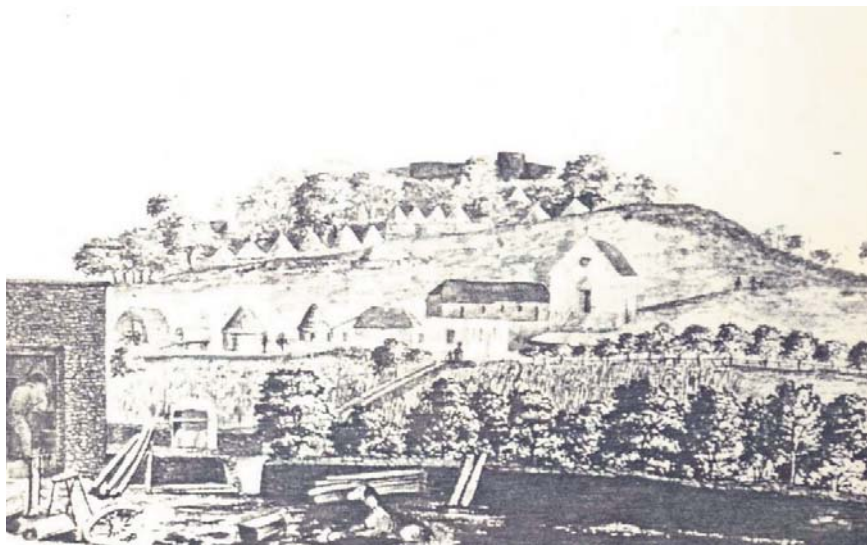


Figure 6

Vaulted timber frame wagon shelter (far left) on the Botshabelo Mission Station, (ca. 1868 - Berlin Mission Society) Middelburg, Mpumalanga Province (photograph of drawing: Restoration report, Hannes Meiring).

Single space ‘waenhuis’

A single space ‘waenhuis’ is built to accommodate a wagon and to fulfil other minor storage needs. It consists of one room with no dividing walls or screens. In its simplest form it is just big enough for one wagon. In a drawing (dating back to the early 1860s) of the mission station Botshabelo, near Middelburg (Mpumalanga Province), a structure that seems to be a wagon shelter, appears behind the old parsonage (figure 6). It is located at the same site where a ‘waenhuis’ and stables were later erected. It is a vaulted structure with a timber frame covered

with either grass mats or thatch. It is open at the gable ends. Although it occurs on a mission station of the Berlin Mission Society (1864-1978) and not on a farm, it is worth mentioning as an example of a type. Without generalising, one would like to believe that the example on the drawing is not an isolated case and that similar structures occurred on farmsteads elsewhere in the vicinity or the region.

Research done by the Ditsong: National Museum of Cultural History in the Waterberg (Limpopo Province) during the 1980s²⁰ revealed that although particular vernacular building types (and building techniques) have been exclusively associated with the so called Pioneer period²¹ of the early Transvaal (1848-1880), examples are still found in the Waterberg. ‘Un-refined’ organic materials and construction techniques seem to be still in use and buildings are, to some extent, still built according to the old traditions common in the region. Excellent examples are the single space structures with thatched roofs that have been recorded during the 1980s (figures. 5, 6, 8 and 9).



Figure 7

Timber frame shed behind dwelling with hipped roof and wide cut-back entrance - Waterberg region, ca. 1986 (photograph: Ditsong National Museum of Cultural History, Pretoria).

Timber posts varying from 300mm-400mm in diameter and a height of about 1200 mm (above the ground), were planted into the ground defining a rectangular floor plan. They supported a roof structure without proper trusses (without tie beams and connected rafters) leaving the small ‘hanebalke’ (rafters) to serve as connecting ‘tie beams.’²² The eaves of the roof reach down to about a meter from the ground. Originally, the supports were completely vertical but over several years they have been pushed outwards due to the vertical thrust of the trusses that have been over simplified to create more space for high vehicles and storage of fodder. These structures are not called wagon sheds or ‘waenhuis’ but are just referred to as ‘skure’ or sheds by the locals. Most of them have hipped roofs. What is interesting about those used as ‘waenhuis’ is the entrance on the opposite side of the hipped end. The gable has been opened-up to allow the wagon to be pushed inside without its canopy. These shelters are big enough to accommodate several wagons although the entrance is just wide and high enough for a single vehicle to pass through. They have no walls or specially prepared floors. The height of the ground surface inside and outside is the same.



Figure 8

Entrance to a large timber frame shed with entrance cut-back to allow a wagon to enter, Waterberg region, ca. 1986 (photograph: Ditsong National Museum of Cultural History, Pretoria).



Figure 9

Interior of a large timber frame shed with thatched roof. The timber supports have been pushed outwards due to the lack of horizontal support (tie beams) of the roof structure, ca. 1986 (photograph: Ditsong National Museum of Cultural History, Pretoria).

The most common single-space ‘waenhuis’ are those with walls, distinguishing them from ‘shelters’ (open-sided timber frame structures). These were constructed from different types of material: stone and brick masonry and clay being the more traditional and in more recent times, sheet iron.



Figure 10

Reconstructed ‘waenhuis’ on historic farmstead on the farm Hartebeestpoort, Pretoria east (photograph: M. Naudé)

On the farm Rietvlei in the Potchefstroom district the lower half of the building's walls was constructed of stone and the upper half with moulded clay (figure 11). The stone part of the wall is an extension of the foundation ending in a plinth for the clay walling. The building is still used and is big enough to accommodate about six wagons. According to the owner of the farm, it always had an iron roof, but the date of construction is unknown.²³



Figure 11

Large 'waenhuis' on the farm Rietvlei in the Potchefstroom district (Northwest Province) with rammed earth walls based on a foundation of dolomite stone (photograph: Ditsong: National Museum of Cultural History, Pretoria).

On the south-eastern Transvaal Highveld, stone was the building material most often used and many 'waenhuis' were completely built with stone.²⁴ Sandstone, ferricrete ('oukclip') and granite were common. On the farm Bosmansfontein in the Middelburg district, the 'waenhuis' was constructed with blocks of ferricrete ('oukclip') as are most of the other outbuildings on the farmstead. On the farm Rietvlei in the Potchefstroom district, the waenhuis was partially constructed with dolomite masonry (figure 11).

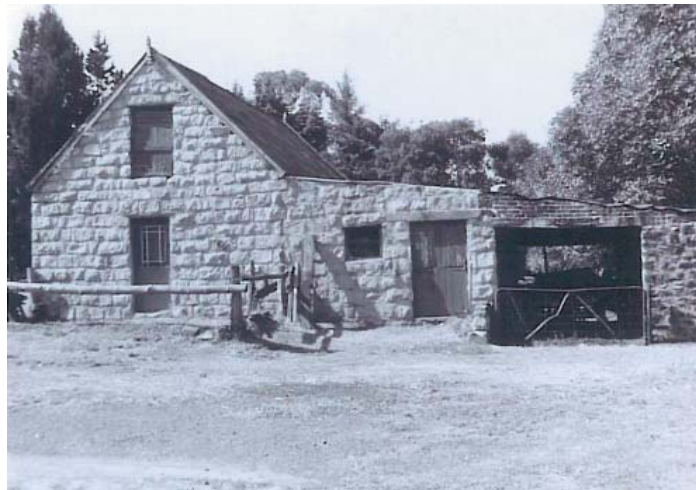


Figure 12

Sandstone 'waenhuis' (main entrance at the back), which later became a farm school on the farm Roodepoort, Middelburg district (Mpumalanga Province) ca. 1990 (photograph: M. Naudé).

Multiple-space 'waenhuis'

Single-space examples would satisfy the purist with a preference for vernacular buildings without additions and lean-tos. Unfortunately, a common feature of farm buildings is their ability 'to grow'. As farming activities became more diversified and mechanised, additional spaces were added to existing structures. It implied expanding the use of existing covered space

or extending it. Existing buildings are sometimes internally subdivided into numerous spaces. In the case of ‘waenhuis’, it led to the creation of a second category, which may be referred to as a multiple-space ‘waenhuis’.

When a ‘waenhuis’ is turned into a multiple space building, the first visible changes are the appearance of internal walls and one or more doors and windows in the exterior walls. The roof structure remains the same but the space utilisation and internal layout are altered. It is not always easy to tell whether the original building was built for a single or a multiple- space use, especially when photographs are the only source. The example on the farm Orange Grove²⁵ is a case in point (figure 13). It shows a clay building with an entrance at the gable end, but a second door and a single window appears on the one side. This suggests that the building could have been entered from the gable end and through a smaller second entrance. It can be interpreted as a single-space building with several entrances or a multiple-space building consisting of a number of rooms each with a separate entrance.



Figure 13

‘Waenhuis’ on the farm Orange Grove with rammed earth walls with dwelling and detached outdoor kitchen in the back, ca. 1890 (photograph: Gross Collection, Ditsong: National Museum of Cultural History, Pretoria).

A second, more visible change to the exterior of these buildings is the appearance of lean-to roofs and rooms. Farming implements or anything that cannot be accommodated inside is left outside and stacked next to the building. It is eventually covered by a roof, or a verandah is added to be used as additional covered storage space. The existing building is used as a core to which lean-to roofs can be mounted. Verandahs are often constructed on either the one or on both sides of the building, seldom on gable ends. As the risk of burglary in open storage always exists, the verandah area is eventually sealed off with walls, lockable doors and windows. On the farm Roodepoort in the Middelburg district, a dairy was added to the one side of the ‘waenhuis’ and a storage area onto the dairy (figure 12). On many farms both sides of the core building are utilised for lean-tos and in some cases a second or a third space for additional vehicles is created in a similar manner (figure 12).



Figure 14
Sandstone ‘waenhuis’ and stables (for horses) on the farm De Rust west of the town of Heidelberg (Gauteng Province) (photograph: M. Naudé).

‘Waenhuis’ sharing the same floor plan as the dwelling

The second broad category consists of ‘waenhuis’ that are part of the farm dwelling and the waenhuis is not a separate building but shares the same roof as the dwelling.

On the farm Kaalfontein (Rayton district), the dwelling was constructed first and the ‘waenhuis’ added later (figure 15). The ‘waenhuis’ has a single entrance and is constructed with stone while the dwelling was constructed with bricks. Although both have lofts they are not connected and the two buildings functioned separately. A separate staircase from inside the ‘waenhuis’ leads to the loft. The entrance (for the wagon) is located at the gable end of the ‘waenhuis’ section of the building and opens onto the farmyard leaving the front yard (Afrikaans: ‘voorplaas’ - to the south) and the backyard (Afrikaans: ‘agterplaas’ - to the north) accessible for other household activities. The original farmyard was entered from the west exposing the side elevation of the dwelling and the entrance to the ‘waenhuis’ to the principal (historic) entrance onto the farmyard. On the farm Kafferskraal, also in the Rayton district, the ‘waenhuis’ and farmhouse share the same roof. The position of the ‘waenhuis’ is not easily recognisable from outside as both are built with plastered bricks.



Figure 15
‘Waenhuis’ attached to the 1880 farm dwelling on the farm Kaalfontein - Rayton district (photograph: M. Naudé).

A third example, in the same district, occurs on the farm Pienaarspoort. The house is currently inhabited by farm workers and although the large entrance has been closed off with bricks, the original timber lintel of the door is still intact and partially exposed. The entrance is also located in the gable end of the dwelling to exploit the height of the gable. On the farm Doornhoek in the Pilgrims Rest district (figure 16), the original farmhouse has been extensively altered and upgraded over time while the stone ‘waenhuis’ has remained unaltered and was left unplastered.²⁶ The ‘waenhuis’ shares its back wall (back gable end) with the dwelling but each building functions independent from the other.



Figure 16

The ‘waenhuis’ on the farm Doornhoek is attached to the farm dwelling, Pilgrims Rest district - Mpumalanga Province (photograph: Ditsong: National Museum of Cultural History, Pretoria).

On the farm Uitkomst in the Ermelo district, the ‘waenhuis’ is located in the centre with rooms along its sides. The ‘waenhuis’ and the adjacent rooms were built at the same time and no rooms were added later. The building was constructed with granite with sandstone quoining. The ‘waenhuis’ section has a hipped roof with a dormer-like loft door directly above the ‘waenhuis’ entrance. The roofs on the adjacent rooms are almost flat resembling those of a typical lean-to.²⁷



Figure 17

Granite and sandstone dwelling with ‘waenhuis’ located in the centre, on the farm Uitkomst in the Ermelo district – Mpumalanga Province (photograph: Ditsong: National Museum of Cultural History, Pretoria).

The remains of a building with a similar floor plan to the example on the farm Uitkomst is located on land belonging to Sappi (producer of coated fine paper and chemical cellulose) between Machadodorp and Lydenburg (Mpumalanga Province). The building is constructed

with stone and the roof has been completely destroyed by fire. The ‘waenhuis’ is located in the centre with rooms surrounding this central space.²⁸

The last remaining dwelling on the farmstead of the farm Lakenvlei in the Belfast district (Mpumalanga Province) has been altered extensively to adapt to the changing needs of the family. This included the addition of a space for a wagon as part of the floor plan of the homestead.²⁹ The entrance faces towards the front yard and is not located at the gable end of the dwelling. The low lintel assumes that it was used for a transport wagon and not a cart.

Cart sheds

The cart shed on the farm Zwartkoppies³⁰ (east of Pretoria) has no resemblance to the ‘waenhuis’ associated with Boer families. The building is located about 100m from the main house, opposite the cow byres. It is a double storey building and the carts shared the same roof with the horse stables. It does resemble the form, scale and space utilisation patterns of those in Great Britain. The Zwartkoppies example was erected in the period 1899 to 1895 and contains several spaces designed for carts but these spaces are smaller than those for ‘waenhuis’. All the entrances are arched.



Figure 18
Horse stables and cart shed on the farm Zwartkoppies (Pretoria) erected ca. 1886 (photograph: M. Naudé).

Conclusion

‘Waenhuis’ represent a unique segment in the South African vernacular architecture and the typology for this building type is based on the use of various criteria such as space utilisation, site location (on the farmstead), building materials and construction techniques (the latter two not discussed in this paper). The typology consists of two broad categories: (a) single space and (b) multi-space buildings. Some were only erected as temporary shelters and constructed with organic materials such as timber and thatch. Multi-space ‘waenhuis’ were used for storage of fodder, farming implements and any other object and equipment that needed protection. A unique category of ‘waenhuis’ consists of buildings that share the same roof with a dwelling, reminding one of farmhouses on European farmsteads. Neither the building type nor the subject of ‘waenhuis’ have been exhausted and many different angles towards the subject still need to be investigated such as scrutinising different roof structures, the occurrence of lofts and different uses and form giving aspects of ‘waenhuis’ elsewhere in the country. Although ‘waenhuis’ are often larger than dwellings, they are not generally considered the most significant buildings on farmsteads, this building type remains worth investigating. As wagons are no more in use, new ‘waenhuis’ and shelters will not be built and only reconstructed for display or demonstration

purposes at historic sites and museums. Therefore, the remaining examples need to be recorded and the material published before this part of our vernacular settlement and architectural history disappears completely. The information is also essential for restoration and without it not even academic reconstructions will be possible.

As the topic of ‘waenhuis’ has not been exhausted and the paper does not claim to be a complete and encyclopedic compilation of types that may occur in the study area, this paper forms merely an introductory chapter in the vast subject that covers this building type. Several papers and essays still need to be compiled to give a rare insight into the ‘waenhuis’ with all its social and technical associations that may add value to the architectural and cultural historical value of the building type.

Notes

1. The only part of the farm that has remained is the farmstead currently used as a site museum called “Pioneer Museum”, which is managed by Ditsong: Museums of South Africa.
2. An academic reconstruction of a building or site is done on paper. It is an academic exercise based on all the information available on the subject (or object). It consists of general and specific information regarding a site or building. Such a reconstruction is done to identify lacking data and to create a “model” before embarking on the full-scale ‘construction’ of the particular building.
3. The ‘waenhuis’ was recorded by the former Section for Library and Museum Services, which was a division of the former Transvaal Provincial Administration.
4. The farmstead is currently completely surrounded by dwellings as it is located in a residential area within the boundaries of the Potchefstroom City Council. Only the farmhouse and outbuildings remained of the original farm.
5. Sloane, 1955. *Our Vanishing Landscape*. New York, p.
6. Peters, 1986. *Discovering traditional farm buildings*. Hong Kong, pp. 31-32.
7. Weller, J. 1982. *History of the farmstead. The development of energy sources*. London, p.
8. Radford, D. 1991. The carriage house and stables in South African domestic architecture. In *South African Journal of Cultural History*, Vol. 5, October. pp. 135-142.
9. Encarta, p. 2089.
10. Encarta, p. 292.
11. Encarta, p. 364.
12. Grosskopf, pp. 39, 52.
13. Praagh, p. 426.
14. Naudé 1988, p. 67.
15. Photographs were found in the archives in Pietermaritzburg and Bloemfontein. Others were found in the photograph collections of the Potchefstroom Museum and the Ditsong: National Museum of Cultural History (Pretoria). Formerly known as the National Cultural History Museum.
16. Grosskopf, p. 35.
17. Simpson, p. 849.
18. Grosskopf, p. 35.
19. Radford 1991, p.136.
20. Unpublished Aukema papers. Wilna Aukema, a former researcher at the National Cultural History Museum (now Ditsong: National Museum of Cultural History) undertook field research (in the Waterberg area between 1980 and 1988) on the vernacular architecture of the white pioneer settlers. The research has never been completed (Ms Aukema died in a motor car accident in 1989) but some of the data has been published by M. Naudé.
21. The term “Pioneer Period” was created to distinguish between temporary frontier dwellings that had to last for more than one or two years. Another criterion for distinguishing between a temporary shelter and a ‘pioneer’ dwelling is the fact that that the latter were core buildings in the ‘real’ sense. Rooms were added onto the gable ends or other elevations whereas in the case of the temporary shelters it did not happen. The latter types were left to decay.
22. Walton, pp. 20-22.
23. Naudé 1988, p. 188.
24. Naudé 1993, p.52.
25. Now located within the jurisdiction of the

- Greater Johannesburg Metropolitan area. The buildings and their context have been destroyed completely.
26. The 'waenhuis' was not plastered when the fieldwork was undertaken in 1989, but was plastered and whitewashed in 1997.
 27. Naudé 2000, p. 45.
 28. According to the local residents it was used as a dwelling and not merely a 'waenhuis' with storage rooms added to it.
 29. The dwelling is currently inhabited by farm workers and the 'waenhuis' not used as it was intended.
 30. The farm is located in the Pretoria municipal area on the old Bronkhorstspuit road and belonged to the former well-known industrialist Sammy Marks. The farmhouse was constructed in 1884 and the cart shed and some of the other outbuildings around 1886.

Works cited

- De kok, K.J. 1904. *Empires of the veld*. Durban: Juta.
- Doyle, A. C. 1976. *The Great Boer War* (Vol. 1). Cape Town: Struik.
- ENCARTA World Dictionary. 1999. London: Bloomsbury.
- Grosskopf, J. F W. 1929. Rural impoverishment and rural exodus. In *Report of the Carnegie Commission*. Stellenbosch: Pro Ecclesia.
- Naudé, M. 2007. The architectural significance of the Pioneer House in Silverton (Pretoria). *Research Journal: National Cultural History Museum* (Vol. 2). Pretoria: National Cultural History Museum.
- Naudé, M. 2004. A legacy of timber frame sheds and shelters in the Trans-Vaal River region. *South African Journal of Art History* (Vol. 19). Pretoria: Art Historical Work Group of South Africa.
- Naudé, M. 2000. Vernacular stone buildings and structures on farmsteads in the southern districts of the Mpumalanga Province. *South African Journal of Cultural History* 14(2).
- Naudé, M. 1994. The use of stone on the farmsteads of the eastern Transvaal. *Year Book 11*. Pretoria: Africana Society of Pretoria.
- Naudé, M. 1988. Opname van volksboukuns in enkele Transvaalse distrikte. *Unpublished Report to the Human Sciences Research Council*. Pretoria: National Cultural history Museum.
- Peters, J.E.C. 1981. *Discovering traditional farm buildings*. Aylesbury, England: Shire Publications.
- Praagh, L.V. 1913. *The Transvaal and its mines*. Johannesburg: Praagh & Lloyd.
- Radford, D. 1991. The carriage house and stables in South African domestic architecture. *South African Journal for Cultural History*: 5(4).
- Simpson, C.B. 1906. Notes on the termites of the Transvaal and methods to be used against them. *The Transvaal Agricultural Journal* (October). Pretoria: Government Printer.
- Sloane, E. 1974. *Our vanishing landscape*. New York: Ballantine Books.
- Walton, J. 1986. Hanebalk, collar-beam and tie-beam. *South African Journal for Cultural History*: 3(1).
- Weller, J. 1982. *History of the farmstead, the development of energy sources*. London: Faber & Faber.

Mauritz Naudé is a researcher at the Ditsong: National Museum of Cultural History (Pretoria). He holds a Masters degree in Architecture (Conservation). His special field of interest is the conservation of architecture and the built environment. Other interests include the study of vernacular architecture, indigenous building materials and construction techniques.

For the past 15 years he has been lecturing on a part-time basis at various universities and has published various articles on folk buildings such as rondavels, timber frame sheds and early farm dwellings in the Waterberg region and the southern districts of the Mpumalanga Province.