

# Dutch embassies in context

The influence of local conditions in architectural intercontinental designs of Dutch embassy buildings

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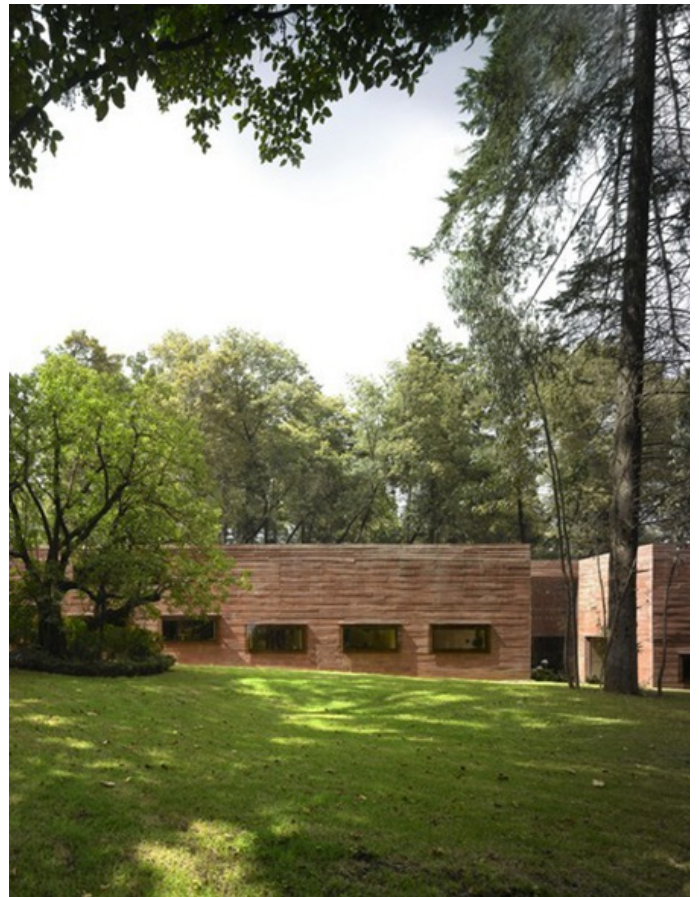
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**Abstract**

The design of embassies is a highly sensitive and important challenge. Two case studies of Dutch embassies in Africa designed by Dutch architects are chosen to investigate the way local conditions influence the design of Dutch purpose-built embassies on other continents. A literature study was performed to compare the two case studies on three aspects: how the designs deal with local culture, climate and architecture. Data was analysed in the form of texts, drawings and photos. The results showed that both case studies dealt with the local conditions in a very similar way in all three aspects. The results could serve as a toolbox for designers without experience in the design of a building in another continent.



**Keywords:** embassy design, political architecture, local, Addis Ababa, Maputo

## Introduction

How is the image of the Netherlands represented abroad? This is the fundamental question that has to be answered by architects of embassies in foreign countries. Thus, one could argue that the design of embassies is a highly sensitive and important challenge. Dutch embassies abroad are chosen as the object of study to analyse how Dutch architects have dealt with this task. The Netherlands are represented abroad via more than 140 embassy and consulate buildings (Rijksoverheid, n.d.). This made them even the number seven on the list of most embassies across the globe (Architectenweb, 2010). Until the end of the 19<sup>th</sup> century, both the embassy office and the residency of the ambassador were combined in the same building (Tilman, 2005). Nowadays, these two functions are often separated. The residency serves as the place where the ambassador lives and can receive guests, while the embassy's primary function is an office building with special focus on communication and security (Tilman, 2005).

The design of buildings abroad is different from designing in the country of the architect's origin, because there is a distinct culture to engage with. Especially when designing in another continent, the culture differs even more. It could be inspirational for designers to learn how other architects deal with local conditions abroad. The two topics of *embassies* and *designing in another continent* combined are researched in this paper. Therefore, the research question is:

*How do local conditions influence different architects in the design of Dutch purpose-built embassies on other continents?*

As the research question indicates, only *purpose-built* embassy buildings are investigated, because embassies which are housed in existing buildings are often designed by native architects who are used to the local culture, while this paper researches the interaction between foreign architects and local conditions. Therefore, two Dutch embassies designed by Dutch architects are chosen:

1. The Dutch Embassy in Maputo, Mozambique, by KAAN Architecten (2004);



Figure 1. From "Netherlands Embassy Mozambique," by KAAN Architecten, n.d. (<https://kaanarchitecten.com/project/netherlands-embassy-2/>).

2. The Dutch embassy in Addis Ababa, Ethiopia, by Dick van Gameren & Bjarne Mastenbroek (2005);



Figure 2. From "Ethiopia Dutch Embassy," by Mecanoo, n.d. (<https://www.mecanoo.nl/Projects/project/72/Ethiopia-Dutch-Embassy>).

These case studies are chosen because they are both built in this century, located in countries outside Europe and designed by renown architects, so enough sources and publications are available.

Architecture is always formed by "social or cultural conditions" (Vale, 2008, p. 3). Especially government buildings are a primary way to carrying out an ideology (Vale, 2008). So is the case for Dutch embassy buildings in other countries, which function as an architectural representation of the country, as stated by Damen (2019). The first purpose-built embassy buildings abroad by the Netherlands appeared after the Second World War (Damen, 2019). However, the amount of publications regarding the relation between national identity and embassy architecture of the Netherlands is limited (Colenbrander & Damen, 2015) (Damen, 2017), while this topic has been researched more frequently on an international scale (Daene & Butler, 2012) (Floré & McAtee, 2016). Earlier comparable research has been conducted by Damen (2019) with the conclusion that two Dutch embassies in Bonn and Washington represent the sober identity of the Netherlands. The used material, brick, is associated with Dutch architecture (Damen, 2019). However, few other analysis has been made comparing different Dutch embassies abroad, while there is an abundance of research regarding embassies of the United States of America (Loeffler, 1998) or the United Kingdom (Bertram, 2011) (De Maeyer, n.d.). Most studies about smaller countries focus on one case study, or compare embassies of different countries in one capital (De Maeyer, n.d.).

The two embassies that will be analysed in this paper, could be described as less sober. This could be explained by De Maeyer (2020), as he states that the relation between embassy architecture and identity is subject to change due to the dynamic character of diplomacy. The Dutch government wanted embassy buildings to show the Dutch' position in the architectural field (Tilman, 2005). Respect for the local culture was also implemented in their vision, with the goal of establishing a cultural bridge between the Netherlands and the country in which the embassy is built (Ministerie van Buitenlandse Zaken, 1997). The architectural policy report prescribed the Dutch embassies in foreign countries should be *functional, formal, not excessive, timeless* but also *representative* (Patijn, W. & Projectgroep Architectuurnota, 2000). A good balance between soberness and distinction has to be found (Patijn, W. & Projectgroep Architectuurnota, 2000). This is confirmed by Peter van Exel,

former director of accommodation of *Buitenlandse Zaken* as he describes the image of the Netherlands as transparent, open, and formal, just like other West-European or Scandinavian countries (Huisman, 2004). Tilman also explains that not only the local culture but also the local climate should influence the design (Tilman, 2005).

The *local conditions* of the research question are subdivided in three aspects. Both buildings are compared based on the way they deal with:

1. The local culture;
2. The local climate;
3. The local (vernacular) architecture.

At the third aspect, there will also be investigated to what extent the embassies comply with the *guidelines* of the government about the *functionality, formality and transparency* that should represent the Dutch culture (Patijn, W. & Projectgroep Architectuurnota, 2000). The embassies will be analysed through photos, drawings and textual descriptions. The descriptions are a mixture of texts provided by the architectural firms themselves, architectural critics and personal findings. The goal of this paper is to provide an overview of how renown Dutch architects have dealt with local conditions in the design of buildings in a foreign country. This can serve as a toolbox for other designers of embassies or other buildings abroad.

The upcoming three chapters analyse the three case studies in a structured way. They are all compared on the same aspects, as mentioned before. The embassies are placed in a chronological order, so Chapter 1 deals with the embassy in Mozambique (2004) and Chapter 2 with the embassy in Ethiopia (2005). In Chapter 3, the research is concluded with an overview in which the three embassies are compared based on the different aspects. In Chapter 4, the paper is evaluated, including recommendations for future research.

## Chapter 1 - The Dutch Embassy in Maputo, Mozambique, by KAAAN Architecten (2004)



Figure 3. From "Netherlands Embassy Mozambique," by KAAAN Architecten, n.d. (<https://kaanarchitecten.com/project/netherlands-embassy-2/>)

### 2.1 Maputo

Mozambique is located along the southeastern coast of Africa. Its capital, Maputo, is the biggest city of the country with 1,2 million inhabitants. Only from 1975 on – the year of its independence from Portugal - the city is called Maputo. Before, the name was Lourenço Marques, after the Portuguese sea captain who explored the area in 1545 as one of the first Europeans (Claus en Kaan architecten et al., 2014). The Portuguese influence is still strongly visible in the capital. However, other developments have also influenced the image of Maputo as it looks like now. For example people from South Africa, who moved to Maputo at the end of the 19<sup>th</sup> century and brought the Victorian style with them (which they in turn had adopted from the British) (Claus en Kaan architecten et al., 2014). After this, modernism dominated the building practise, so it did in Maputo from the 1940s on (Claus en Kaan architecten et al., 2014).

Maputo can be described as a relatively poor economic city, with deficient infrastructure and basic needs for a vast amount of its inhabitants (Claus en Kaan architecten et al., 2014). Most of the urban area of Maputo consists of a flat ground level with a rational street grid. This is also the case for the plot which houses the Dutch Embassy of Mozambique.

### 2.2 The designer

The project started in 1998 and the building was completed six years later in 2004. The design was done by the office Claus en Kaan architecten, in specific by Kees Kaan, who co-founded the firm in 1987 with Felix Claus. In 2014, their partnership came to an end and Kees Kaan continued together with Vincent Panhuysen and Dikkie Scipio with the architectural firm KAAAN architecten.

Kees Kaan was educated at the faculty of architecture of the Delft University of Technology from 1980-1987, and he is still active there as Chairman of the Architecture Department and the Complex Projects Chair. He mostly focusses on large scale projects, such as big public buildings and airports.

### 2.3 The building – General

The embassy is located in the outskirts of Maputo, in a district with relatively big houses with gardens. Two plots east of the plot of the chancellery stands the Igreja de Santo António da Polana, an architecturally iconic church with an expressive concrete, white structure (figure 4). The embassy building itself has an L-shaped floor plan (figure 5). A wooden fence closes the form to make it a rectangle which covers the whole plot. Between the fence and the indoor part of the building, a garden is located.

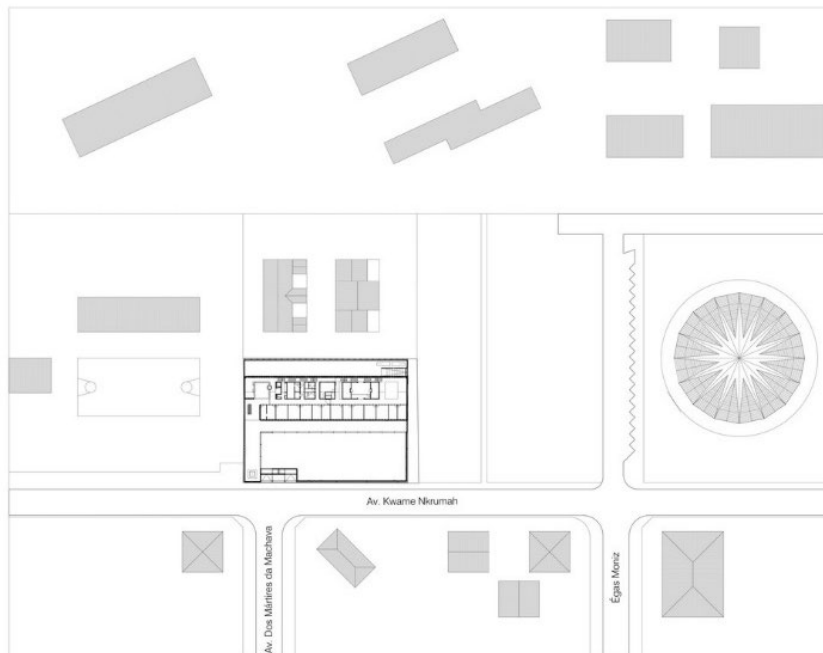


Figure 4. Site plan of the Dutch Embassy in Mozambique, with the Igreja de Santo António da Polana on the east. From "Netherlands Embassy / KAAAN Architecten," by Archdaily, n.d. ([https://www.archdaily.com/428294/netherlands-embassy-claus-en-kaan-architecten/5231bd70e8e44efe3a000085-netherlands-embassy-claus-en-kaan-architectensection?next\\_project=no](https://www.archdaily.com/428294/netherlands-embassy-claus-en-kaan-architecten/5231bd70e8e44efe3a000085-netherlands-embassy-claus-en-kaan-architectensection?next_project=no))

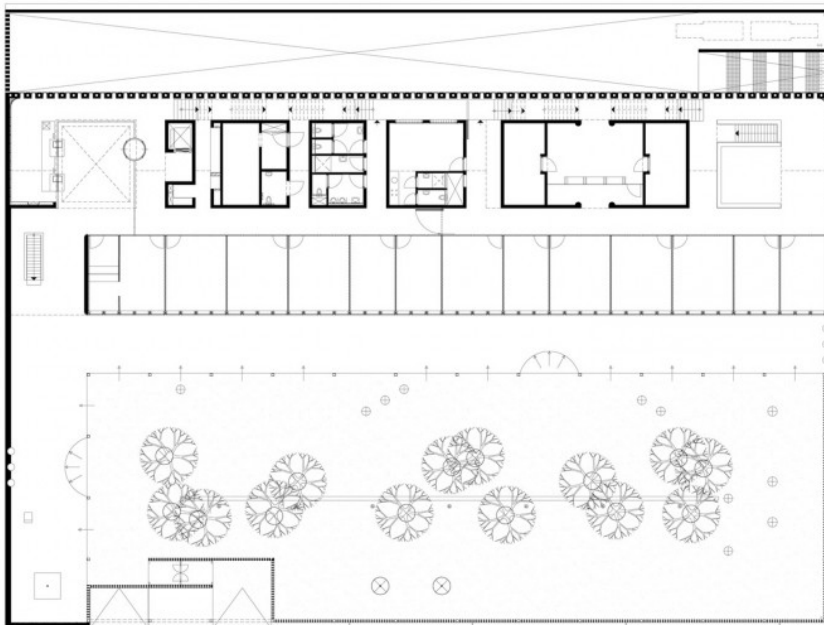


Figure 5. Ground floor plan of the Dutch Embassy in Mozambique. From "Netherlands Embassy Mozambique," by KAAAN Architecten, n.d. (<https://kaanarchitecten.com/project/netherlands-embassy-2/>)

The 2500 m<sup>2</sup> chancellery consists of three stories, two of them above ground and a parking in the basement (figure 6). The ground and first floor are structured in a similar way. On the south side of the buildings main volume is a row of office rooms facing the garden. They are flanked by more

variable space, such as a conference room and a library. These functions are positioned as 'islands' in the middle of the building volume, with corridors running on both sides. One of them is along the north façade, comprising two stairs which are accessible from two sides (figure 7).

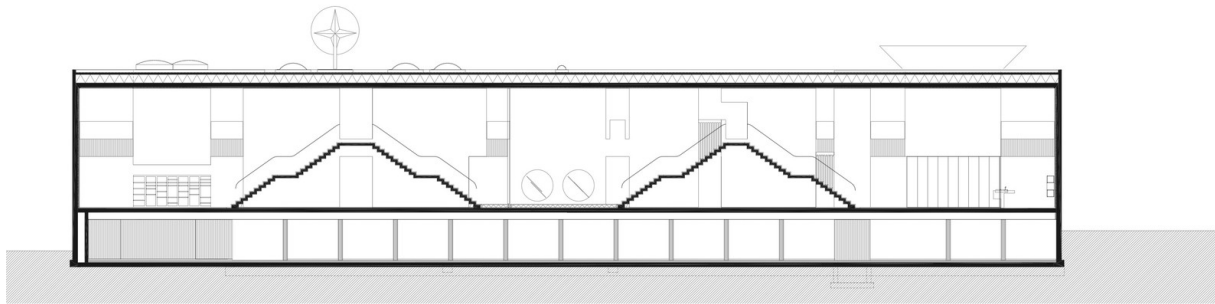


Figure 6. Section of the Dutch Embassy in Mozambique. From "Netherlands Embassy / KAAO Architecten," by Archdaily, n.d. ([https://www.archdaily.com/428294/netherlands-embassy-claus-en-kaan-architecten/5231bd70e8e44efe3a000085-netherlands-embassy-claus-en-kaan-architecten-section?next\\_project=no](https://www.archdaily.com/428294/netherlands-embassy-claus-en-kaan-architecten/5231bd70e8e44efe3a000085-netherlands-embassy-claus-en-kaan-architecten-section?next_project=no))



Figure 7. Image of the corridor and stairways along the north façade of the Dutch Embassy in Mozambique. From "Netherlands Embassy / KAAO Architecten," by Archdaily, n.d. ([https://www.archdaily.com/428294/netherlands-embassy-claus-en-kaan-architecten/5231bd70e8e44efe3a000085-netherlands-embassy-claus-en-kaan-architecten-section?next\\_project=no](https://www.archdaily.com/428294/netherlands-embassy-claus-en-kaan-architecten/5231bd70e8e44efe3a000085-netherlands-embassy-claus-en-kaan-architecten-section?next_project=no))

## 2.4 The building - Local culture

Very often, also in this district, villas are designed with a garden around it. However, Kees Kaan reversed this concept, and covered the whole plot with the embassy building, embracing the garden 'inside', as seen in Figure 5 (2Doc, 2012). This is actually contrasting with the "open" culture in Mozambique, where there is a relatively strong community sense noticeable (Sen Nag, 2019). The exclusion of the environment is strengthened by the high fence and large concrete outer façade (Figure 8). However, a main reason for this are the special safety measurements that are required for an embassy. In fact, project leader Rob Gaunt explains in a documentary that the design team actually tried to incorporate the relation with the surroundings as good as possible by extending the concrete base of the fence horizontally to create seating space (Figure 8), as well as an opening in the wall to have an acoustic connection to playground of the adjacent school (2Doc, 2012).

Kees Kaan mentions in an interview that the way of building construction in Mozambique varies a lot from the Dutch approach (2Doc, 2012). Because he worked with local contractors only, there was less prefabrication in a factory and guarantee about building materials and measurements. In exchange, there was way more flexibility during the construction phase.

A steel veranda is running along the (inner) south façade (Figure 9). This element is borrowed from Portuguese colonial architecture in Maputo (Archello, n.d.).



Figure 8. The high wooden fence around the inner garden with concrete base. From "Netherlands Embassy Mozambique," by KAAAN Architecten, n.d. (<https://kaanarchitecten.com/project/netherlands-embassy-2/>)



Figure 9. Steel veranda along the inner facade. From "Netherlands Embassy Mozambique," by KAAAN Architecten, n.d. (<https://kaanarchitecten.com/project/netherlands-embassy-2/>)

## 2.5 The building - Local climate

Maputo has a dry subhumid tropical climate (Simões & Garcia, 2019). The average yearly precipitation is comparable to the Netherlands (around 813 millimetres), but most of this rain falls during winter (Wikipedia, 24 January 2023). The average temperature varies from 19 °C in July to 27 °C in January.



Climate has played an important role in the design (KAAN architecten, n.d.). The northeast façade is quite closed, as this façade has the highest sun exposure because Maputo is located in the Southern Hemisphere (Figure 10). However, there are still narrow, vertical windows to let in light into the corridor and the adjacent rooms (Figure 11). By placing the corridor along the northern façade, this works as a buffer for the places that are dedicated for a longer stay (the rooms and offices) (Figure 7). The south façade, on the contrary, is open to let in light (Figure 13). In this way the interaction with the garden is maximized. The twelve olive trees in the garden are also used to break sunlight (KAAN Architecten, n.d.).



Figure 10: Sunpath on the location at 25 December, at 13:00. From "Computation path for the sun for Maputo," by Suncalc, n.d. (<https://www.suncalc.org/#/9.0194,38.7152,19/2023.12.25/13:00/1/1>).



Figure 11: Northern façade with narrow windows . From "Netherlands Embassy Mozambique," by KAAAN Architecten, n.d. (<https://kaanarchitecten.com/project/netherlands-embassy-2/>)

## 2.6 The building – Balance between local and Dutch architecture

The embassy is described by Hans Ibelings as a building which looks like it has always been there (Claus en Kaan architecten et al., 2014). The reasons behind this judgement are the use of a tree specie in the garden which is common in Maputo, the absence of architectural extravagancy and the use of materials that fit into the surroundings. The outer façade is made out of concrete (Figure 12), while the inner façade which is facing the garden is clad in wood (Figure 13). Both materials have a natural look. From outside the building, it may even appear as a rock resting on the sandy ground (Figure 12).

Wood is also present in the interior, which adds to the idea that there is a very thin line between inside and outside (Figure 13). This is facilitated by the climate in Maputo, whereas this concept is not very common in The Netherlands. The materials come from Mozambique or the adjacent country South Africa (Claus en Kaan architecten et al., 2014)



Figure 12. The rock-like appearance from the concrete façade blends in with its surroundings. From "Netherlands Embassy Mozambique," by KAAAN Architecten, n.d. (<https://kaanarchitecten.com/project/netherlands-embassy-2/>)



Figure 13. Wood is used inside and outside of the building, blending interior and exterior. From "Netherlands Embassy Mozambique," by KAAAN Architecten, n.d. (<https://kaanarchitecten.com/project/netherlands-embassy-2/>)

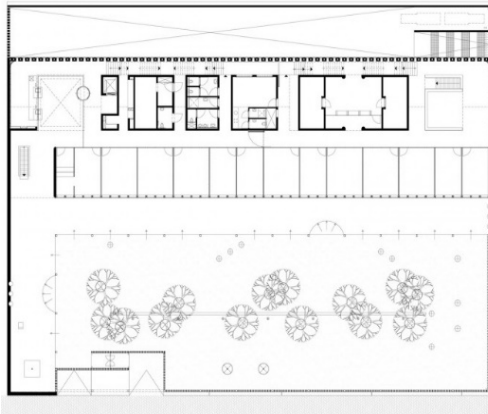


Figure 14. Ground floor plan of the Dutch Embassy in Mozambique. From "Netherlands Embassy Mozambique," by KAAAN Architecten, n.d. (<https://kaanarchitecten.com/project/netherlands-embassy-2/>)



Figure 15. Open wooden fence, showing the transparent south façade. From "Netherlands Embassy Mozambique," by KAAAN Architecten, n.d. (<https://kaanarchitecten.com/project/netherlands-embassy-2/>)

The floor plan is built up from north to south in four horizontal 'rows' with different functions: a staircase, various rooms, a corridor and offices. This clear layout expresses the *functional* and *formal* identity the Dutch government wants to stand for. Also, the open fence aligns with the wish for *transparency*. The north façade (figure 11) can be describes as *formal*, which is also in the governmental architectural guidelines.

## Chapter 2

### The Dutch embassy in Addis Ababa, Ethiopia, by Dick van Gameren & Bjarne Mastenbroek (2005)



Figure 16. From "Ethiopia Dutch Embassy," by Mecanoo, n.d. (<https://www.mecanoo.nl/Projects/project/72/Ethiopia-Dutch-Embassy>).

#### 2.1 Addis Ababa

Addis Ababa is the capital of Ethiopia, located in the East of Africa, 4000 kilometres north of Maputo. Addis Ababa houses nearly 4 million inhabitants, making it the city with the biggest population in Ethiopia. It is also the cultural, financial and administrative centre of Ethiopia (The Editors of Encyclopaedia Britannica, 2023). The city houses multiple international institutes, such as the headquarters of the African Union (AU) and the United Nations Economic Commission for Africa (UNECA), which results in the capital having a high diplomatic relevance (Van Gameren, D. & Tola, A., 2017). The capital region has a significant higher Human Development Index as the other regions in the country (0.741 compared to 0.440-0.603) (Wikipedia, 2023, 19 February). Addis Ababa is surrounded by hills, which is where the Dutch embassy is built.

#### 2.2 The designers

The project design was done in 1998, and the construction took place from 2002 until 2005. The design of both the buildings and the landscape was made by the architects Dick van Gameren (1962) and Bjarne Mastenbroek (1964), under the name of *De Architectengroep*, an architecture firm they both joined in 1994, as they hoped to work on bigger projects. Before, they had their own architectural practice together, named *Van Gameren – Mastenbroek architecten*, founded in 1991 (Kunstbus, 2022). They both graduated from Delft University of Technology, Van Gameren in 1988 and Mastenbroek in 1989. With the design of the Dutch embassy, Van Gameren and Mastenbroek won the Aga Khan award in 2007. The Aga Khan award is assigned to outstanding projects built in the Islamic world (Archined, 2007).

Right now, Van Gameren is a partner at Mecanoo in Delft, as well as Dean of the Faculty of Architecture at the Delft University of Technology (since 2019) and Professor of Architecture and Dwelling (2005). Van Gameren mostly focusses on the design of residential buildings, in The

Netherlands as well as on other continents as Asia and Africa, but his portfolio also includes large scale town planning and education projects.

Bjarne Mastenbroek co-founded SeARCH in 2002 with Ad Bogerman. SeARCH is an internationally operating office which is driven by a close *"relationship between architecture and site"* (SeARCH, n.d.). Their projects are conceived as landscapes, providing a strong connection between interior and exterior (SeARCH, n.d.).

### 2.3 The building – General



Figure 17: Location of plot in outskirts of Addis Ababa. From *"Embassy of the Netherlands,"* by Balamir, A., 2007 (<https://s3.us-east-1.amazonaws.com/media.archnet.org/system/publications/contents/1709/original/FLS1953.pdf?1384751173>).

The embassy of the Netherlands is located in the outskirts of Addis Ababa on a plot covered by a eucalyptus grove (figure 17), contrasting with the densely ground space cover of the adjacent neighbourhoods. To the west, the 5,5-hectare site descends into a valley (Mecanoo, n.d.). Seven buildings are present on the plot (figure 18): the residence of the vice-ambassador is located in the southwest, three smaller staff houses and a small school are positioned along the northern edge of the plot, and an entrance building in the east. The latter two were added to the programme as the project developed (Balamir, 2007). The main building, housing the ambassadors residency and the chancellery where all the paperwork is done, is located in the middle of the plot and consists of a rectangular volume of 140 x 15 metres. All buildings are connected via a road that runs not only through the eucalyptus trees, but also through the main building. Its volume is carefully embedded in the hilly area (figure 19), and the road separates the chancellery on the east side from the residency on the west side (figure 18). The main volume will be the object of analysis in this paper, as there is much more data about it available than about the other buildings.

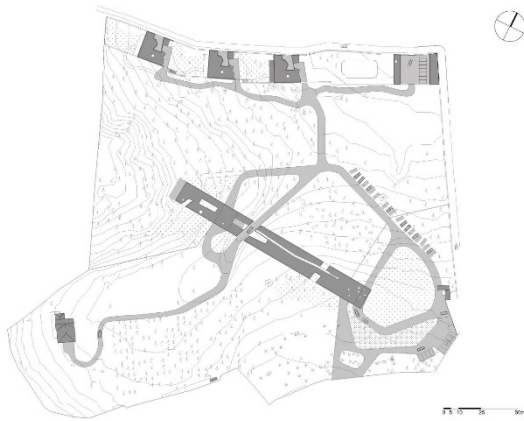


Figure 18: Top view of the complex of buildings embedded in the eucalyptus grove. From "Ethiopia Dutch Embassy," by Mecanoo., n.d. (<https://www.mecanoo.nl/Projects/project/72/Ethiopia-Dutch-Embassy>).



Figure 19: Three-dimensional display of the plot with functions. From "Embassy of the Netherlands," by Balamir, A., 2007 (<https://s3.us-east-1.amazonaws.com/media.archnet.org/system/publications/contents/1709/original/FLS1953.pdf?1384751173>).

Because the volume of the building is integrated in the hill, the building only has two storeys on both ends, while corridors are also sloping. The driveway passes through the building twice, once on the lower floor – where it separates the ambassador’s residence from the chancellery - and once on the roof. Special attention also has been given to the design of the roof, which will be further elaborated in chapter 2.6. The landscape design of grass with the Eucalyptus trees in combination with the clear, rather simple volume provide a very calm environment, which is stressed by the sounds of insects which overrule the noise of the city.

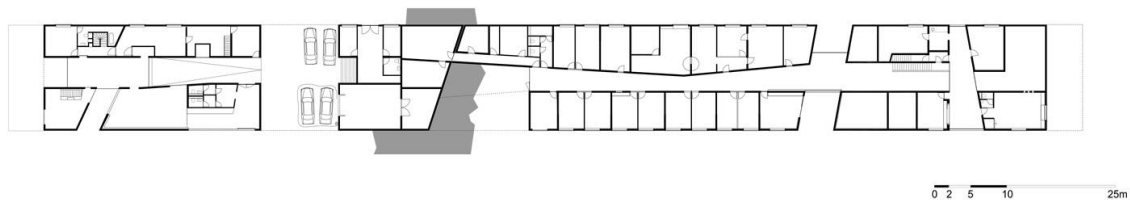


Figure 20: Upper floor of the main building with the chancellery on the east and the residency on the west side. "Ethiopia Dutch Embassy," by Mecanoo., n.d. (<https://www.mecanoo.nl/Projects/project/72/Ethiopia-Dutch-Embassy>).



Figure 21: Lower floor of the main building with the chancellery on the east and the residency on the west side. "Ethiopia Dutch Embassy," by Mecanoo., n.d. (<https://www.mecanoo.nl/Projects/project/72/Ethiopia-Dutch-Embassy>).

## 2.4 The building - Local culture

Ethiopia differs from other African countries in many ways, as it has never been colonised. This results in customs which are deeply rooted in daily practice for centuries (Evason, 2018). Nearly two-third of the inhabitants are Christian, while around one-third is Muslim (Wikipedia, 2023, March 12). These religions are also displayed architecturally, as the Christian community is renown for its churches carved out of the rocks, while a Muslim town such as Harar resembles a Mediterranean

town with its white plastered buildings (Balamir, 2007). On national level there is generally a strong community focus, as many people rely on their family or neighbours, but it is hard to identify one national culture as Ethiopia contains lots of different ethnic groups (Evason, 2018). Addis Ababa itself is also a city of big contrasts in terms of ethnicity (Balamir, 2007).

The community feeling is not present between the terrain of the embassy and the surrounding districts. However, the designer cannot be blamed, because this has to do with the safety measures which have to be taken into account when designing an embassy. In the complex itself, unity is obtained with the use of the same material (concrete), the landscape design with its grass and Eucalyptus trees, and the winding road which connects all buildings. However, the different buildings have completely different forms (figure 18), for example: figure 24 and 25 (main building) compared to figure 22 (entrance building). By working with a local architect (ABBA Associates) and contractor (Elmi Olindo & Co Plc.), the engagement with the local community is strengthened (Balamir, 2007).



Figure 22: Entrance building of the embassy complex. From "Mission Statements," by 2Doc, 2014 (<https://www.2doc.nl/documentaires/2012/07/mission-statements.html>).

### 2.5 The building - Local climate

Addis Ababa lies at the foot of the Entoto Mountains at an altitude of around 2.500 metres, where a subtropical highland climate is present (Wikipedia, 2023, March 12). Because of its location close to the equator (1.000 km above it) and its altitude, the average temperature is very stable throughout the year, averaging 17 °C. The precipitation varies a lot during the year, with summer months averaging 300 mm of rainfall per month, while it can be very dry in winter with only an average of 7 mm precipitation. During this winter period the temperature varies more between day and night: during the day it is around 16 °C, with the temperatures usually not exceeding 23 °C, while it can even freeze during the night. During summer, the average temperature rises up to 19 °C.

As seen in figure 5, the building is oriented almost exactly east-west. This makes the heat gain in winter as optimal as possible. Even though the temperature is moderate in Ethiopia, additional heating provided by the sun is always useful. During winter, the sun height rises up to 57° at its highest point of the day (on 25 December). At this point, the building is oriented in a way that the façade is fully exposed to collect the heat of the sun (figure 23), as it is positioned perpendicular to the heat source. As is visible in the sun path analysis in figure 7, the south façade of the embassy is able to collect heat during almost the whole day. However, this principle does not work as perfectly as it sounds theoretically, because there is a number of trees present in front of the south façade

which block the sun during winter as well as summer, because the Eucalyptus trees keep their leaves all year round.



Figure 23: Sunpath on the location at 25 December, at 13:00. From 'Computation path for the sun for Addis Ababa,' by Suncalc, n.d.(<https://www.suncalc.org/#/9.0194,38.7152,19/2023.12.25/13:00/1/1>).



Figure 24: South façade with relatively small windows and canopy protecting from sun. From "Ethiopia Dutch Embassy," by Mecanoo., n.d. (<https://www.mecanoo.nl/Projects/project/72/Ethiopia-Dutch-Embassy>).



Figure 25: Entrance of the chancellery, seen from the northeast. Cantilever providing shade on the east end of the building. From "Embassy Ethiopia / Bjarne Mastenbroek and Dick van Gameren," by Archdaily., n.d. (<https://www.archdaily.com/198254/embassy-ethiopia-bjarne-mastenbroek-and-dick-van-gameren/5004d8b928ba0d4e8d0007ed-embassy-ethiopia-bjarne-mastenbroek-and-dick-van-gameren-photo>).

Concrete is used as main building material (figure 24 & 25). Because of its relatively high mass (around  $2.300 \text{ kg/m}^3$ ), it is capable of stabilising the temperature in and around the building because of the concept of *thermal mass*. A material with a high mass does not heat up or cool down quickly. On days when the sun is shining bright, the building will not heat up very fast, and eventually cool down during the night (Reilly & Kinnane, 2017). This effect is strengthened because the building is partially embedded in the ground, which has a very stable temperature.

The windows are quite small, resulting in a relatively low percentage of glass in the façade (figure 24). In this way, undesired heat loss or gain is reduced because the 'closed' parts of the façade have a higher insulation value (R-value). Also, cantilevers and canopies are used to provide shading (figure 24 & 25). These cantilevers are also considered by Balamir as an influence of Dutch contemporary architecture (2007).

Because all of these aspects are integrated well in the building design, there is no need for a mechanical HVAC-system, except for the reception spaces of the ambassador's residence (Balamir, 2007).

## 2.6 The building – Balance between local and Dutch architecture

The main material of the embassy is concrete, which is pigmented in the same red-ochre colour as the Ethiopian earth. Because walls, floors and ceilings are all made out of this material, the building has the atmosphere of a cave (Balamir, 2007). This is also where the inspiration of the building came from: the rock-hewn churches in Lalibela (Ethiopia) (figure 26).



Figure 26: Church of Saint George, one of the 11 rock-hewn churches in Lalibela. From 'Rock-Hewn Churches of Lalibela Tours and Tickets,' by Viator., n.d. (<https://www.viator.com/Lalibela-attractions/Rock-Hewn-Churches-of-Lalibela/d40601-a28714>).

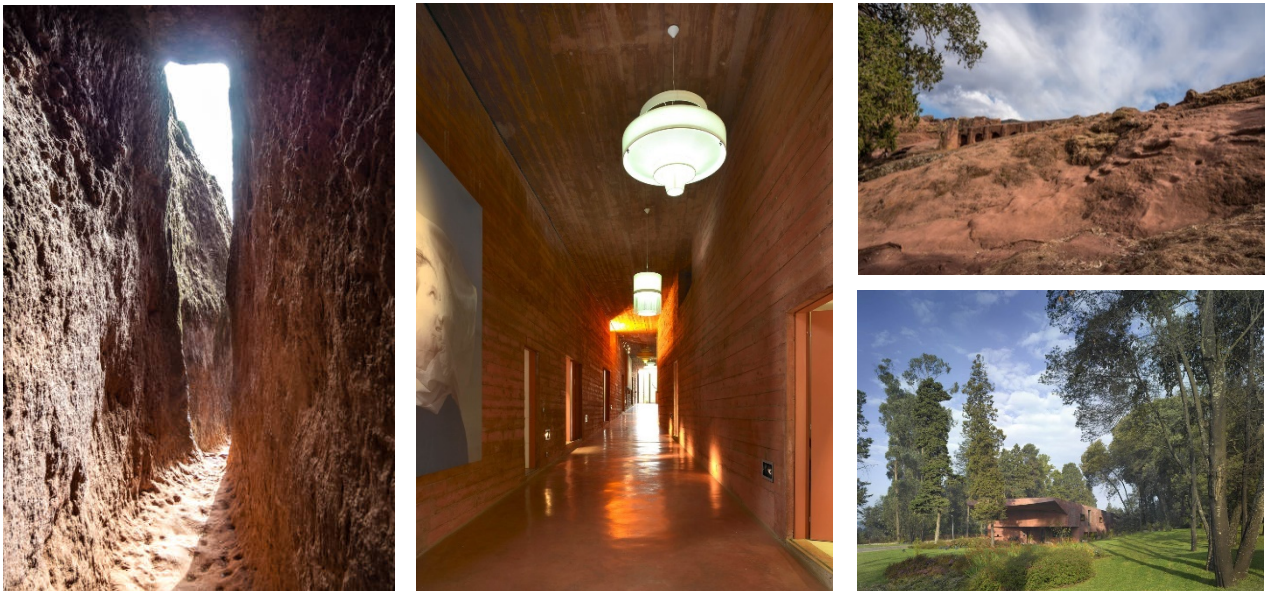


Figure 27: Visual comparison of Dutch Embassy in Ethiopia and rock-hewn church of Biete Lehem.

Left: From 'Bete Abba Libanos rots-gehouden kerk, Lalibela, Ethiopië - Stockbeeld,' by E. Rudolf, 2019. (<https://www.istockphoto.com/nl/foto/bete-abba-libanos-rots-gehouden-kerk-lalibela-ethiopi%C3%AB-gm1157311907-315739359>).

Middle: From 'Ethiopia Dutch Embassy,' by Mecanoo, n.d. (<https://www.mecanoo.nl/Projects/project/72/Ethiopia-Dutch-Embassy>).

Upper right: From 'Biete Lehem,' by Adobe Stock, n.d. (<https://stock.adobe.com/nl/search?k=%22biete+lehem%22>).

Lower right: From 'Ethiopia Dutch Embassy,' by Mecanoo, n.d. (<https://www.mecanoo.nl/Projects/project/72/Ethiopia-Dutch-Embassy>).

As seen in the visual analysis (figure 27) the relation between the building and the ground is really important, which is also visible in the fact that the interior of the building reacts to the sloping terrain (figure 28) (Mastenbroek et al., 2021). This is also stressed by Dick van Gameren in a documentary about the building (2Doc, 2012). Also, the embassy mimics the cave-experience of the Ethiopian churches. Concrete was used because all needed elements were available close to the site: sand, gravel and cement. When wood, steel or bricks would have been chosen as construction material, it would be needed to import them. However, the last ingredient for concrete was a point of discussion: water.



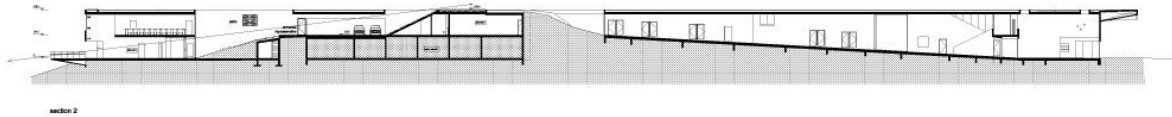


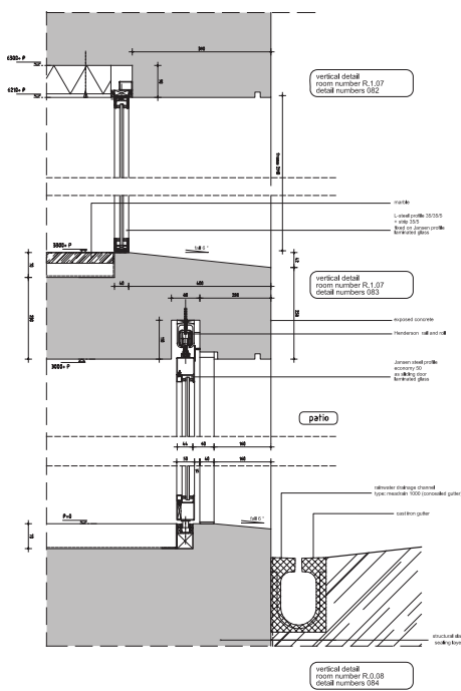
Figure 28: Longitudinal section of the embassy, showing the undulating terrain and the building reacting on it. From "Ethiopia Dutch Embassy," by Mecanoo., n.d. (<https://www.mecanoo.nl/Projects/project/72/Ethiopia-Dutch-Embassy>).

To combine the Dutch and Ethiopian culture literally in one building, Mastenbroek and Van Gameren designed a roofscape with pathways that consist of two parts: one Dutch polder-like landscape (above the residency), and one Ethiopian craggy landscape (above the chancellery) (figure 29).



Figure 29: Roof design of the embassy, with the representation of the Dutch landscape of the left above the residency, and the Ethiopian landscape above the chancellery. From "Ethiopia Dutch Embassy," by Mecanoo., n.d. (<https://www.mecanoo.nl/Projects/project/72/Ethiopia-Dutch-Embassy>).

The initial idea was to make the roof a permanent water landscape, which would catch rainwater to spray the terrain (Van der Put, 2015). However, this idea was neglected by the government because they thought this would not be appropriate in a country in which water scarcity is still a problem (Huisman, 2004).



Details show how the monolith, rock-like experience is obtained (Figure 30). Concrete is used all the way from the inside to the outside. Because small notches are needed for rainwater runoff and window frames, this requires intensive work labour on site by the craftsmen who construct the building, instead of prefabricated concrete slabs which are often used in The Netherlands. By misaligning the 14-15 centimetre planks of the formwork of the concrete, the layered texture of the building is created on purpose (Balimir, 2007).

Figure 30: Vertical 1:20 detail of the outer façade of the chancellery showing the exposed concrete. From "Embassy of the Netherlands," by Balimir, A., 2007 (<https://s3.us-east-1.amazonaws.com/media-archnet.org/system/publications/contents/1709/original/FLS1953.pdf?1384751173>).

### 3. Conclusion

The main goal of this paper was to answer the question: *How do local conditions influence different architects in the design of Dutch purpose-built embassies on other continents?*

To investigate this topic, two case studies were analysed: the Dutch embassy in Maputo (Mozambique) and the Dutch embassy in Addis Ababa (Ethiopia). To explain clearly how the architects approached the local conditions, a comparison is made structured by the several aspects which are also used in the different chapters. It turned out that they have dealt with many aspects in a similar way.

Starting with the cultural or societal aspects of the building design, both embassies are built by local contractors. By doing so, the architects could profit from the relatively low labour costs in Africa compared to those in The Netherlands. The results are very labour intensive designs, with for example large concrete masses casted on site. This was also necessary, as prefabrication is less common in Africa than in The Netherlands. In correlation with the collaboration with native contractors, the architects also chose for building materials which were known by the local constructors. Something both buildings also have in common, is their very different typology compared to other buildings in the districts they are located in, as the embassy in Maputo embraces a garden (instead of adjacent villas which have a garden around the building) and the building form (rectangular volume) and concept (partially integrated in the ground) of the embassy in Addis Ababa can also not be found the surrounding urban area. This contrast with the existing (building) culture probably not originated because of the desire to represent certain Dutch governmental characteristics, but potentially because of the approach of the individual designers in combination with the budget and special building typology compared to adjacent buildings. In the gardens of both embassies grow tree species which are common to the area.

The architects of the embassies have had special attention for the incorporation of climate design. By the ideal orientation in relation to the sun, the size of the windows dependent on the solar exposure of the façade, as well as using a corridor (Maputo) or thermal mass (Addis Ababa) as heat buffer, the indoor climate is optimised in a passive way. Still, office spaces receive a high amount of daylight due to smart positioning in the floor plan layout.

Furthermore, the floor plan of both buildings is orthogonal and has a very clear structure. Offices and rooms with other functions are accessible through corridors. The layout of the embassy in Addis Ababa is very innovative in the way it uses the undulating ground level to divide the residence from the chancellery. By doing so, both designs comply with the desire of the Dutch government to express *functionality* and *formality*. Another guideline for the design of Dutch government buildings is *transparency*, something which is not achieved as successful. Even though this is a tough challenge in the design of embassies because of its strict safety regulations, both buildings can be conceived as 'intransparent'. In Maputo because of the high fence and the big façade with few or narrow windows. In Addis Ababa because of the relatively closed façade and a high fence around the plot as well. The building materials used in both designs are chosen carefully. As a result, both buildings fit into the environment as rock-like monoliths. Lastly, both buildings took inspiration from the local historical architecture. This is displayed in the 'Portuguese' veranda in Mozambique and the cave-like experience which comes from the rock-hewn churches in Ethiopia.

<b>Main aspect</b>		<b>Embassy in Maputo</b>	<b>Embassy in Addis Ababa</b>
<b>1. Cultural/ societal</b>	Contractors	Built by local contractors	Built by local contractors
	Building materials	Using building materials which are common in the area	Using building materials which are common in the area
	On-site or prefabricated?	Labour intensive on-site construction	Labour intensive on-site construction
	Embedded in cultural tradition	Building typology (concept and form) varies from surrounding buildings	Building typology (concept and form) varies from surrounding buildings
	Native plant species	Use of tree specie that is common in the area	Use of tree specie that is common in the area
<b>2. Climate</b>	Sun	Ideal orientation to sun	Ideal orientation to sun
	Windows	Sizing of windows according to solar exposure	Sizing of windows according to solar exposure
	Heating/cooling	Corridor along north façade as heat buffer	Use of thermal mass
	Daylight	High amount of daylight due to smart floor plan	High amount of daylight due to smart floor plan
<b>3. Local vs Dutch architecture</b>	Architectural tradition	'Portugese' veranda	Ethiopian rock-hewn churches
	Origin materials	Materials from Mozambique and South Africa	Materials available in Ethiopia and imported from Italy
	Appearance materials in relation to surroundings	Monolith structure, colours blend in with surrounding	Monolith structure, colours blend in with surrounding (red-ochre as the local ground colour)
	<i>Functionality</i>	All rooms well reachable by corridors	All rooms well reachable by corridors
	<i>Formality</i>	Clear floor plan and monumental façade	Division between residency and chancellery
	<i>(in)transparency</i>	High but open fence, few windows in west and east façade	High fence, relatively few windows

Table 1: Comparison of the Dutch embassies in Maputo and Addis Ababa on several aspects

#### 4. Discussion

The conclusion provided an overview of the relation between two Dutch embassy designs and their context. By having this 'toolbox' as main output, the original research question was therefore answered successfully. This toolbox could be useful, in particular for (young) designers who have not had any experience with the design of a building which is located outside their own country. They can learn from how other architects have done this before (without necessarily copying them).

Nowadays, all three architects (Kees Kaan, Bjarne Mastenbroek & Dick van Gameren) are at the head of relatively large offices which have realised multiple prestigious abroad (KAAN Architecten, n.d.) (Mecanoo, n.d.) (SeARCH, n.d.). But, when they worked on the two embassies that were analysed in this paper, they were young designers themselves, barely having any experience with projects abroad. That is why it would be beneficial to do a comparable research with projects that were designed by architects who already have done multiple projects abroad. Interesting would be if the way experienced architects deal with the local context would differ from the relatively unexperienced (in terms of projects abroad) architects of this paper.

In addition, the way both designs deal with the local circumstances are very similar. A reason why this could be, is that all three architects were educated at the Delft University of Technology. Further comparable research should also include designers from different educational backgrounds, to make sure this does not influence the results.

Another recommendation would be to conduct a similar research but then focused on embassies from another sending country. As stated in the introduction, most of the existing research is about embassy buildings of the United States, the United Kingdom, or only focuses on one case study. A comparison of two case studies of embassies from another country would maybe have led to other results, as the background of the designers may vary or the sending country may have a different approach to representation compared to The Netherlands.

## Bibliography

### About embassy buildings in general:

1. Architectenweb. (2010). *Debat over toekomst Nederlandse ambassade*. <https://architectenweb.nl/nieuws/artikel.aspx?ID=23524>
2. Bertram, M. (2011). *Room for Diplomacy: Britain's Diplomatic Buildings Overseas 1800-2000*. Spire Books.
3. Colenbrander, B. J. F., & Damen, W. M. (2015). Beeldvorming over de Nederlandse architectuur in de wereld 1980-2013. In T. Bevers, B. Colenbrander, J. Heilbron, & N. Wilterdink (editors), *Nederlandse kunst in de wereld: Literatuur, architectuur en beeldende kunst 1980-2013* (blz. 148-231). Vantilt.
4. Damen, H. (2017). Nederlandse residenties als zinnebeeld van de natie: De diplomatieke interieurs van Jan Holstein. *Eigenbouwer. Tijdschrift voor de goede smaak*, (8), 34-48. <http://www.eigenbouwer.nl/>
5. Deane, D., & Butler, S. (2012). *Nationalism and Architecture* (R. Quek, Ed.) (1st ed.). Routledge. <https://doi.org/10.4324/9781315248356>
6. Damen, H. (2019). Sober Nederlands vlagvertoon: Naoorlogse ambassadegebouwen in Washington en Bonn. *Bulletin KNOB*, 118(4), 36–49. <https://doi.org/10.7480/knob.118.2019.4.4309>
7. De Maeyer, B. (2020). Conceptualising Diplomatic Representation on an Architectural Level: The Purpose-Built Embassy as Architectural Typology? *Proceedings of the Society of Architectural Historians, Australia and New Zealand*, 36, 114–125.
8. De Maeyer, B. (n.d.). *Het ontwerpen van ambassades voor Middle Powers: de architectuur van Belgische en Nederlandse diplomatie in een globaliserende wereld*. Contemporanea. <https://www.contemporanea.be/nl/article/20192-reviewnl-het-ontwerpen-van-ambassades>
9. Floré, F., & McAtee, C. (2016). *The Politics of Furniture: Identity, Diplomacy and Persuasion in Post-War Interiors* (1st ed.). Routledge. <https://doi.org/10.4324/9781315554389>
10. Huisman, J. (2004). Driekleurige mist in Berlijn. *De Smaak van de Overheid*, 15, 17-19.
11. Loeffler, J., C. (1998). *The Architecture of Diplomacy: Building America's Embassies* (1st ed.). Princeton Architectural Press.
12. Ministerie van Buitenlandse Zaken. (1997). *Vastgoed in beweging*.

13. Patijn, W. & Projectgroep Architectuurnota. (2000). *Ontwerpen aan Nederland*. Sdu Uitgevers.
14. Rijksoverheid. (n.d.). *Ambassades, consulaten en overige vertegenwoordigingen*. Retrieved March 9, 2023, from <https://www.rijksoverheid.nl/onderwerpen/ambassades-consulaten-en-overige-vertegenwoordigingen>
15. Tilman, H. (2005). Koninkrijk op vreemde bodem. *De Architect*, 6, 26-37.
16. Vale, L., J. (2008). *Architecture, Power and National Identity* (2nd ed.). Routledge.

The Dutch Embassy in Maputo, Mozambique, by KAAN Architecten (2004):

1. 2Doc.nl. (2012). *Mission Statements* [Video]. 2Doc.  
<https://www.2doc.nl/documentaires/2012/07/mission-statements.html>
2. Archdaily. (2013). *Netherlands Embassy / KAAN Architecten*. Archdaily.  
<https://www.archdaily.com/428294/netherlands-embassy-claus-en-kaan-architecten>
3. Archello. (n.d.). *Netherlands Embassy Mozambique*. Retrieved April 7, 2023, from <https://archello.com/project/netherlands-embassy-maputo>
4. Claus en Kaan Architecten, Forjaz, J., & Bouvier, P. (2014). *Claus en Kaan Architecten: the royal Netherlands embassy in Mozambique*. NAI Publishers.
5. KAAN Architecten. (n.d.). *Netherlands Embassy Mozambique*. Retrieved 6 January, from <https://kaanarchitecten.com/project/netherlands-embassy-2/>
6. Maputo (stad). (2023, March 21). In *Wikipedia*.  
[https://nl.wikipedia.org/wiki/Maputo\\_\(stad\)#Klimaat](https://nl.wikipedia.org/wiki/Maputo_(stad)#Klimaat)
7. Sen Nag, O. (2019). *The Culture of Mozambique*. Worldatlas.  
<https://www.worldatlas.com/articles/the-culture-of-mozambique.html>
8. Simões, R.N., Garcia, P.R. (2019). Shading in Architecture and its Relation with Natural Cooling: Learning from Maputo, Mozambique. In: Guedes, M., Cantuaria, G. (Eds.), *Bioclimatic Architecture in Warm Climates*. (pp. 193-228). Springer, Cham.  
[https://doi.org/10.1007/978-3-030-12036-8\\_6](https://doi.org/10.1007/978-3-030-12036-8_6)

The Dutch embassy in Addis Ababa, Ethiopia, by Dick van Gameren & Bjarne Mastenbroek (2005):

1. 2Doc.nl. (2012). *Mission Statements*. [Video]. 2Doc.  
<https://www.2doc.nl/documentaires/2012/07/mission-statements.html>
2. Archdaily. (2012). *Embassy Ethiopia / Bjarne Mastenbroek and Dick Van Gameren*. Archdaily.  
<https://www.archdaily.com/198254/embassy-ethiopia-bjarne-mastenbroek-and-dick-van-gameren>

[gameren](#)

3. Archined. (2007). *Dick van Gameren en Bjarne Mastenbroek receive Aga Khan prijs 2007*. <https://www.archined.nl/2007/09/dick-van-gameren-en-bjarne-mastenbroek-receive-aga-khan-prijs-2007/>
4. Architectura Viva. (2005). Building Materials. *AV Monografias*, 115.
5. Balamir, A. (2007). *Embassy of the Netherlands*. Aga Khan Award for Architecture. <https://s3.us-east-1.amazonaws.com/media.archnet.org/system/publications/contents/1709/original/FLS1953.pdf?1384751173>
6. Climates to travel. (n.d.). *Climate – Addis Ababa (Ethiopia)*. Retrieved 23 March, 2023, from <https://www.climatestotravel.com/climate/ethiopia/addis-ababa>
7. Ethiopia. (2023, March 12). In *Wikipedia*. <https://en.wikipedia.org/wiki/Ethiopia#Religion>
8. Evason, N. (2018). *Ethiopian Culture*. Cultural Atlas. <https://culturalatlas.sbs.com.au/ethiopian-culture/ethiopian-culture-core-concepts>
9. Huisman, J. (2004). Driekleurige mist in Berlijn. *De Smaak van de Overheid*, 15, 17-19.
10. Mastenbroek, B., SeARCH, Baan, I. (2021). *dig it! Building Bound to the ground*. Taschen.
11. Kunstbus. (2022). *Bjarne Mastenbroek*. <https://www.kunstbus.nl/architectuur/Bjarne+Mastenbroek.html>
12. List of Ethiopian regions by Human Development Index. (2023). In *Wikipedia*. [https://en.wikipedia.org/wiki/List\\_of\\_Ethiopian\\_regions\\_by\\_Human\\_Development\\_Index](https://en.wikipedia.org/wiki/List_of_Ethiopian_regions_by_Human_Development_Index)
13. Mecanoo. (n.d.). *Ethiopia Dutch Embassy*. Retrieved 6 January, from <https://www.mecanoo.nl/Projects/project/72/Ethiopia-Dutch-Embassy>
14. Van der Put, P. (2005). Nederlandse ambassade in Addis Abeba (ETH) door Dick van Gameren en Bjarne Mastenbroek. *De Architect*, 6, 38-43.
15. Reilly, A., & Kinnane, O. (2017). The impact of thermal mass on building energy consumption. *Applied Energy*, 198, 108–121. <https://doi.org/10.1016/j.apenergy.2017.04.024>
16. SeARCH. (n.d.). *Profile*. Retrieved March 9, 2023, from <https://www.search.nl/profile/>
17. The Editors of Encyclopaedia Britannica. (2023, February 19). *Addis Ababa*. <https://www.britannica.com/place/Addis-Ababa>
18. Van Gameren, D., & Tola, A. (2017). A City Shaped by Diplomacy: The case of Ethiopia's capital Addis Ababa. *ABE Journal*, (12). <https://doi.org/10.4000/abe.4038>

### Images cover page

Left: KAAAN Architecten. (n.d.). *Netherlands Embassy Mozambique* [Photograph].  
<https://kaanarchitecten.com/project/netherlands-embassy-2/>

Right: Archdaily. (2012). *Embassy Ethiopia / Bjarne Mastenbroek and Dick Van Gameren* [Photograph]. <https://www.archdaily.com/198254/embassy-ethiopia-bjarne-mastenbroek-and-dick-van-gameren>

### Images text

1. KAAAN Architecten. (n.d.). *Netherlands Embassy Mozambique* [Photograph].  
<https://kaanarchitecten.com/project/netherlands-embassy-2/>
2. Mecanoo. (n.d.). *Ethiopia Dutch Embassy* [Photograph].  
<https://www.mecanoo.nl/Projects/project/72/Ethiopia-Dutch-Embassy>
3. KAAAN Architecten. (n.d.). *Netherlands Embassy Mozambique* [Photograph].  
<https://kaanarchitecten.com/project/netherlands-embassy-2/>
4. Archdaily. (n.d.). *Netherlands Embassy / KAAAN Architecten* [Photograph].  
[https://www.archdaily.com/428294/netherlands-embassy-claus-en-kaan-architecten/5231bd70e8e44efe3a000085-netherlands-embassy-claus-en-kaan-architecten-section?next\\_project=no](https://www.archdaily.com/428294/netherlands-embassy-claus-en-kaan-architecten/5231bd70e8e44efe3a000085-netherlands-embassy-claus-en-kaan-architecten-section?next_project=no)
5. KAAAN Architecten. (n.d.). *Netherlands Embassy Mozambique* [Photograph].  
<https://kaanarchitecten.com/project/netherlands-embassy-2/>
6. Archdaily. (n.d.). *Netherlands Embassy / KAAAN Architecten* [Photograph].  
[https://www.archdaily.com/428294/netherlands-embassy-claus-en-kaan-architecten/5231bd70e8e44efe3a000085-netherlands-embassy-claus-en-kaan-architecten-section?next\\_project=no](https://www.archdaily.com/428294/netherlands-embassy-claus-en-kaan-architecten/5231bd70e8e44efe3a000085-netherlands-embassy-claus-en-kaan-architecten-section?next_project=no)
7. Archdaily. (n.d.). *Netherlands Embassy / KAAAN Architecten* [Photograph].  
[https://www.archdaily.com/428294/netherlands-embassy-claus-en-kaan-architecten/5231bd70e8e44efe3a000085-netherlands-embassy-claus-en-kaan-architecten-section?next\\_project=no](https://www.archdaily.com/428294/netherlands-embassy-claus-en-kaan-architecten/5231bd70e8e44efe3a000085-netherlands-embassy-claus-en-kaan-architecten-section?next_project=no)
8. KAAAN Architecten. (n.d.). *Netherlands Embassy Mozambique* [Photograph].  
<https://kaanarchitecten.com/project/netherlands-embassy-2/>
9. KAAAN Architecten. (n.d.). *Netherlands Embassy Mozambique* [Photograph].  
<https://kaanarchitecten.com/project/netherlands-embassy-2/>



10. Suncalc. (n.d.). *Computation path of the sun for: Maputo* [Photograph].  
<https://www.suncalc.org/#/9.0194,38.7152,19/2023.12.25/13:00/1/1>
11. KAAAN Architecten. (n.d.). *Netherlands Embassy Mozambique* [Photograph].  
<https://kaanarchitecten.com/project/netherlands-embassy-2/>
12. KAAAN Architecten. (n.d.). *Netherlands Embassy Mozambique* [Photograph].  
<https://kaanarchitecten.com/project/netherlands-embassy-2/>
13. KAAAN Architecten. (n.d.). *Netherlands Embassy Mozambique* [Photograph].  
<https://kaanarchitecten.com/project/netherlands-embassy-2/>
14. KAAAN Architecten. (n.d.). *Netherlands Embassy Mozambique* [Photograph].  
<https://kaanarchitecten.com/project/netherlands-embassy-2/>
15. KAAAN Architecten. (n.d.). *Netherlands Embassy Mozambique* [Photograph].  
<https://kaanarchitecten.com/project/netherlands-embassy-2/>
16. Mecanoo. (n.d.). *Ethiopia Dutch Embassy* [Photograph].  
<https://www.mecanoo.nl/Projects/project/72/Ethiopia-Dutch-Embassy>
17. Balamir, A. (2007). *Embassy of the Netherlands*. Aga Khan Award for Architecture [Photograph]. <https://s3.us-east-1.amazonaws.com/media.archnet.org/system/publications/contents/1709/original/FLS1953.pdf?1384751173>
18. Mecanoo. (n.d.). *Ethiopia Dutch Embassy* [Photograph].  
<https://www.mecanoo.nl/Projects/project/72/Ethiopia-Dutch-Embassy>
19. Balamir, A. (2007). *Embassy of the Netherlands*. Aga Khan Award for Architecture [Photograph]. <https://s3.us-east-1.amazonaws.com/media.archnet.org/system/publications/contents/1709/original/FLS1953.pdf?1384751173>
20. Mecanoo. (n.d.). *Ethiopia Dutch Embassy* [Photograph].  
<https://www.mecanoo.nl/Projects/project/72/Ethiopia-Dutch-Embassy>
21. Mecanoo. (n.d.). *Ethiopia Dutch Embassy* [Photograph].  
<https://www.mecanoo.nl/Projects/project/72/Ethiopia-Dutch-Embassy>
22. 2Doc.nl. (2012). *Mission Statements* [Photograph].  
<https://www.2doc.nl/documentaires/2012/07/mission-statements.html>
23. Suncalc. (n.d.). *Computation path of the sun for: Addis Ababa* [Photograph].  
<https://www.suncalc.org/#/9.0194,38.7152,19/2023.12.25/13:00/1/1>
24. Mecanoo. (n.d.). *Ethiopia Dutch Embassy* [Photograph].  
<https://www.mecanoo.nl/Projects/project/72/Ethiopia-Dutch-Embassy>

25. Archdaily. (2012). *Embassy Ethiopia / Bjarne Mastenbroek and Dick Van Gameren* [Photograph]. <https://www.archdaily.com/198254/embassy-ethiopia-bjarne-mastenbroek-and-dick-van-gameren>
26. Viator. (n.d.). *Rock-Hewn Churches of Lalibela Tour and Tickets* [Photograph]. <https://www.viator.com/Lalibela-attractions/Rock-Hewn-Churches-of-Lalibela/d40601-a28714>
27. Ernst, R. (2019). *Bete Abba Libanos rots-gehouden kerk, Lalibela, Ethiopië - Stockbeeld* [Photograph]. <https://www.istockphoto.com/nl/foto/bete-abba-libanos-rots-gehouden-kerk-lalibela-ethiopi%C3%AB-gm1157311907-315739359>
- Mecanoo. (n.d.). *Ethiopia Dutch Embassy* [Photograph]. <https://www.mecanoo.nl/Projects/project/72/Ethiopia-Dutch-Embassy>
- Adobe Stock. (n.d.). *Biete Lehem* [Photograph]. <https://stock.adobe.com/nl/search?k=%22biete+lehem%22>
- Mecanoo. (n.d.). *Ethiopia Dutch Embassy* [Photograph]. <https://www.mecanoo.nl/Projects/project/72/Ethiopia-Dutch-Embassy>
28. Mecanoo. (n.d.). *Ethiopia Dutch Embassy* [Photograph]. <https://www.mecanoo.nl/Projects/project/72/Ethiopia-Dutch-Embassy>
29. Mecanoo. (n.d.). *Ethiopia Dutch Embassy* [Photograph]. <https://www.mecanoo.nl/Projects/project/72/Ethiopia-Dutch-Embassy>
30. Balamir, A. (2007). *Embassy of the Netherlands*. Aga Khan Award for Architecture [Photograph]. <https://s3.us-east-1.amazonaws.com/media.archnet.org/system/publications/contents/1709/original/FLS1953.pdf?1384751173>