Gothenburg Hills
Design Methodologies employing local context.

Joar Hansson
Chalmers School of Architecture
Department of Architecture and Civil Engineering
Supervisors: Kengo Skorick & Jonas Runberger
Examiner: Jonas Lundberg
Gothenburg Hills
Design Methodologies employing local context.

Abstract

The purpose of this thesis was to explore architectural design through the development of a design method. The method was established with the objective of exploring ways to identify and interpret aspects of local context and regional characteristics, as well as how to inform a design process by addressing such aspects.

The project was carried out by engaging with a site which itself possesses characteristics typical for the greater region. Specifically, the entry point to the topic of regional characteristics was the variance in topography, which in Gothenburg with its many peaks and valleys certainly is evident.

With a base in site conditions, immediate aspects such as natural materials and textures were explored, but also other more external factors, which originate from the views offered by the site. Said site is a piece of unbuilt public land on top of a hill, bordering a quiet back street whilst within close proximity to an urban node. For the reason of keeping the land public, together with a need for new premises expressed by the local district library, the choice was made to use a public library as building program within the project.

The thesis relates to discourses within regionalism and contextualism as input for architectural design, and was informed by written as well as built work that in different ways deal with these themes. Sampling and reinterpreting were together important design strategies for the process and were used as a way to communicate clarity about adopting contextual references, while avoiding too literal gestures. The result of the thesis is a building whose design originates from a range of different ways to reference local context. In other words, the outcome can be described as a mixture of strategies, which have the incentive to involve certain local characteristics in the design in common.
Student background

Masters Programme in Architecture and Urban Design
Chalmers University of Technology, Gothenburg
2020 – 2022

Universität der Künste, Berlin (Erasmus exchange)
2020 – 2021

Internship
T+E Arkitekter, Gothenburg
2019 – 2020

Bachelor in Architecture
Chalmers University of Technology, Gothenburg
2017 – 2019

Umeå University, Umeå
2016 – 2017

Table of Contents

Abstract 3
Student background 4
Table of Contents 5
Introduction 7
  Background 8
  Thesis question 12
  Purpose 12
  Delimitations 12
  Method 12
  Discourse 14
  Reference projects 16
The context 21
  Site 23
  Sampling textures 26
  Regional landmarks 30
Design proposal 41
  A library 42
  Design strategies 43
  Contextual elements 46
Reflection 66
Bibliography 68
Image references 69
Introduction
How can one define the characteristics of a place and how can it influence architecture? This is a question that many architects have strived to answer, or at least explore, through the design of buildings that in one way or another connect to the local context. The topic has also been extensively discussed by theoreticians.

Regardless whether it is consciously or not, the buildings we design will always be a product of their context to some extent, whether it is about local regulations, material availability or climatic characteristics.

When looking at the city of Gothenburg at a large scale, one characteristic feature that becomes apparent is the topographical variations, a topic which became a starting point for this thesis.

Regional topography
The city of Gothenburg has, due to its geographical location, quite large variations of elevation in its topography. As the city has developed and expanded, the built environment (as well as the natural) has in different ways been shaped by this variance in elevation.

The city has adapted to natural topographical features in several ways, resulting in for example excavation of the ground, terracing or elevating of buildings as strategies on how to meet complex topographical situations. What’s certain is that, in many ways, the hills of Gothenburg has certainly played a role in shaping much of the city’s built environment.

Early in the city’s development there was likely no need to build on the hills or in the slopes, since it was easier to build in the flatter areas in between. A clear exception to this is however the fortifications that were used for defensive purposes, whose placement on top of hills served a clear function.

As the city has grown, interaction between the built environment and complex topographical situations has become inevitable. Nonetheless, many high points of the hills in the city are still to a large extent left unbuilt on, or in some cases crowned by one specific landmark building.

Naturally there is a point in leaving such spots unbuilt. It’s still certainly more complicated and expensive to build in steep slopes than on flat land, and in addition, elements of untouched nature in cities are for several reasons generally regarded as something positive.

Nevertheless, an untouched spot like this was chosen as a site for building upon, for the purpose of engaging with a complex topographical situation and exploring how a building can be designed for such a situation in a way that utilizes the specific characteristics of that site.

The design project is approached as a way to engage with and to design in symbiosis with the topographical conditions, seeing them as opportunities rather than constraints.
Local examples

These are some local examples, in different scales, of architecture whose expression and configuration are conditional of their respective topographical situation.

Nya Masthugget is a housing project developed in a period where many demolitions of older residential buildings took place in Gothenburg, in the 1960s-70s. In this case, it was the demolition of over 200 buildings that made a project of this scale possible. Today it is the largest housing association (bostadsrättsförening) in Sweden, with over 1000 flats (Peter, 2015).

The housing complex does however cultivate the inclined site by terracing the buildings, giving many flats daylight and views down towards the city and the river.

The Biomedical Library (Biomedicinska biblioteket) is located along the busy thoroughfare Per Dubbsgatan. The area is undoubtedly a result of many topographical alterations, but this project still communicates an interplay with its site. The fact that the building is elevated above the street and sits on top of a cliff, is accentuated with concrete cantilevers of large dimensions, which also amplifies the building’s impression of heaviness, significance and an institution.

BRF Viva is an awarded housing project which is developed in close connection to the landscape. Its success is described to be the result of a long and thorough process, with all crucial decisions being supported by relevant research. Inclusion of landscape architects early in the process contributed to the amount of landscape being able to remain intact, and how the buildings interact with it. (Gordan, 2020)
Thesis question

How can local and regional characteristics be defined and how can they influence the design of a building?

Purpose

The purpose of this thesis is to explore how local context and regional characteristics can be used as main driving factors for a building design. This means both to explore how site conditions in the immediate surroundings can contribute to the design of the building, as well as to identify characteristics of the broader region for the same purpose.

Delimitations

The resulting design project should be viewed as a concept design. Building permits, fire regulations and the like were not parts of the design process.

The design project is not about finding a specific technical solution for building on inaccessible land, but rather to explore how the design of a building can be influenced by local characteristics, the site being one such characteristic.

Furthermore, the library as a concept was not challenged within the thesis. A spatial program which can be considered as quite standard for a library was instead used as input for the main focus of the thesis: How local context can be used in the design of a building.

Method

The method used in the thesis can be described as mainly a Research by design approach, but with Research for design as a complementary method.

Aspects under the umbrella of Research for design was mainly data gathering and referencing. This was done in order to learn from written and built work that in different ways deal with the topic of contextualism, from defining and describing to interpreting and executing work based on it. Following referenced work as well as intuition the strategy was then about identifying various aspects of local context and characteristics.

The method of sampling was important for the process and was used for form and material. A point was made to make reinterpretations of sampled form, either through the use of another material, or by using elements for a particular purpose, which was meant for another purpose originally. In addition, form elements also went through a experimentation process which was carried out with a tabula rasa approach, for the purpose of experimentation as an end in itself, and the potential of finding unexpected results.

In parallel, a study was made of the topography and other natural aspects such as views and orientation of the site, and together with the reinterpreted characteristic elements as well as the building program (a public library), a building design was carried out through iterations.

Diagram: Aspects of explored regional characteristics

- Mainly natural features
  - site
  - terrain
  - topography
  - stone textures
  - light conditions
  - directions
- Architecture and structures
  - views
  - regional landmarks
  - historical architecture

13
Discourse

Local context and characteristics

The question on how local context and characteristics of a place can influence architectural design does naturally not have a simple answer. As well as how it can be defined, for that matter. In Cambridge Dictionary (n.d.) character is defined as the particular combination of qualities in a person or place that makes them different from others.

The topic of contextualism has been well discussed in different directions within the architectural discourse. One of the more prominent theories advocating for architecture with regional specificity is Critical regionalism.

Kenneth Frampton and Critical regionalism

As a concept, Critical regionalism was first coined by Alexander Tzonis and Liliane Lefaivre in 1981 but is most well known as it was described by Kenneth Frampton in his text Towards a Critical Regionalism. Six Points for an Architecture of Resistance, first published in 1983. In the text Frampton argues for an approach towards architectural design that he finds is lacking in much of the architecture of the time. Primarily his critique is addressed towards globalization and generic architecture that doesn’t consider specific regional culture, and therefore lacks a sense of connection to its context.

Instead he advocates for an architecture that takes the local culture and context into consideration more carefully, but without being nostalgic. In part, local context is to be understood as natural conditions of the site, such as the light conditions, the climate and the topography. How these conditions have influenced vernacular architecture and how they get to play a role in the design of (new) architecture is an important aspect of Critical regionalism. One example is that of apertures and how they will vary in size, configuration and position in the wall depending on the climate in the part of the world where their building is located. Another example is how the more immediate surroundings are considered: The building of an irregular topography into a flat site is clearly a technocratic gesture which aspires to a condition of absolute placelessness, whereas the terracing of the same site to receive the stepped form of a building is an engagement in the act of "cultivating" the site (Frampton, 1983).

However, at the same time one should also be aware of global trends, advances in technology and so forth, but to implement such aspects in the design in a way that doesn’t neglect regional context (Frampton, 1983).

This seemingly makes Critical regionalism an approach that stays relevant over time, since world culture and technological advancements continuously develop over time. How and what kind of world culture that is brought into the design project will vary from case to case as well as over time, and how one chooses to combine these with local conditions has the potential of making a project with a Critical regionalist approach interesting.

Besides the natural conditions of a specific place, some other aspects are defined as important for a Critical regionalist approach towards architecture. One of these aspects is tactility. While many examples of architecture tend to favour the visual expression, Frampton argues that the other senses should be thought of as equally, if not more important in the perception of architecture (Frampton, 1983).

Tectonics is yet another aspect which is pointed out as important for a Critical regionalist approach. Much of what Frampton regards as globalized architecture tends to have a larger focus on the visual, and surface tends to be detached from structure. He argues instead for the opposite, an architecture where the construction of a building has close ties to its expression (Frampton, 1983).

Avermaete, Patteeuw, Szacka & Teerds (2019) argues that whereas in the 1980s Critical regionalism presented many new perspectives, the ideas are nowadays fully adopted by architecture practices and education institutions.

However, many built projects in Sweden do not reflect this, much due to the discrepancy of values between the theory of Critical regionalism on the one hand and our societal planning system on the other hand, where short term economical profits and efficiency are core values (Grillner, 1994).

Christian Norberg-Schulz and Genius Loci

Another important discussion about place character as a theme is presented in Genius Loci: Towards a Phenomenology of Architecture, by Christian Norberg-Schulz in 1980. As opposed to Critical regionalism, no concrete guidelines on how architecture should relate to its context is introduced. What is mainly presented is instead how a place and its character, or genius loci, can be understood. The book is described in the beginning as a search for a concrete understanding of the environment. (Norberg-Schulz, 1980)

A place according to Norberg-Schulz is a space with a specific character. More specifically a place is a totality made up of concrete things having material substance, shape, texture and colour. Together these things determine an "environmental character" (Norberg-Schulz, 1980).

The character of a place is what gives it its specific atmosphere. Especially important are the natural conditions of a place such as topography, climate and natural light conditions. The character of a place will also vary depending on season, the time of the day as well as how the weather is on that specific day. He writes that when visiting a foreign city, we are usually struck by their specific character. Visiting Khartoum, he describes sand, and its colour and texture, as the one most prominent element that he finds characterizes the city. (Norberg-Schulz, 1980)

Character is generally described with adjectives, but things such as recurring building elements can also be characteristic for a place. Such elements can be described as characteristic motifs. (Norberg-Schulz, 1980)
Reference projects

Alvar Aalto has often been described as an architect with a critical regionalist approach. The Riola Parish Church is one of many examples where Aalto works with the local natural light conditions in order to achieve comfortable indoor lumination. The large clerestory windows are oriented towards north in order to achieve indirect lighting and to avoid too much direct sun radiation.

The exterior form of the church is supposed to reference the surrounding mountainous area of the region.

The Green Corner Building, in Muharraq, Bahrain, shows a straight-forward yet interesting method of using the site in shaping the building elements. The facade consists of sand-casted concrete elements, casted on the ground next to the building, each facade element having a unique surface. (Mollard, 2020)

This method of sampling the local environment is interesting and results in a sort of ornamental expression of the facade with elements that are all irregular and individual.

Aldo Rossi’s *Teatro del Mondo* or *Floating Theather* was part the 1980 Venice Biennale and was a way of interpreting venetian identity, and historical characteristics, combining it all into one object.

The references that Rossi used include for example renaissance theaters, lighthouse architecture and venetian floating carnival structures. (Labedade, n.d.)
The 168 Upper Street building is an example of sampled form from the context (the building that used to be on this plot), and re-interpretation by the use of another material and manufacturing technique than what was the case in the sampled form. The new form carries traces of the technique used, such as creases in between concrete panels as well as marks from the CNC-milled formwork. The difference in building logic is also accentuated by the fenestration layout.
The context
The investigated area in this project is a piece of unbuilt land on the hill of Stigbergstorget. This spot is an example of a type of area that is characteristic for Gothenburg, as described in the introduction. The land has likely been left untouched originally due to complexity of building on a site such as this one, as well as the availability of flatter land close by.

The site is in close proximity to the urban node of Stigbergstorget, but borders the quieter backstreet Kjellmansgatan. The site is only accessible from the southern side as the incline is too steep from all other sides. The southern edge of the site is bordered by a footpath that connects via a smooth slope to Masthuggskyrkan in the south, via stairs to Kjellmansgatan in the east and a very long stair to Bangatan in the west.

The vegetation on the site is relatively sparse and is mainly made up of moss, grass, bushes and some smaller trees. The most prominent feature in terms of natural characteristics on the site is the extensive presence of exposed rock. It occurs both in its natural untouched state, as well as in different shapes as it has been altered by man. The bedrock of the site is made up of the stone species Gabbro and Diorite (Sveriges Geologiska Undersökning, n.d.).

Site

The investigated area is a piece of unbuilt land on the hill of Stigbergstorget. This spot is an example of a type of area that is characteristic for Gothenburg, as described in the introduction. The land has likely been left untouched originally due to complexity of building on a site such as this one, as well as the availability of flatter land close by.

The site is in close proximity to the urban node of Stigbergstorget, but borders the quieter backstreet Kjellmansgatan. The site is only accessible from the southern side as the incline is too steep from all other sides. The southern edge of the site is bordered by a footpath that connects via a smooth slope to Masthuggskyrkan in the south, via stairs to Kjellmansgatan in the east and a very long stair to Bangatan in the west.

The vegetation on the site is relatively sparse and is mainly made up of moss, grass, bushes and some smaller trees. The most prominent feature in terms of natural characteristics on the site is the extensive presence of exposed rock. It occurs both in its natural untouched state, as well as in different shapes as it has been altered by man. The bedrock of the site is made up of the stone species Gabbro and Diorite (Sveriges Geologiska Undersökning, n.d.).
Views from the site

Since the area is situated above its surroundings with steep slopes in three directions, the view towards these directions makes extensive parts of the city palpable from the hill. Outside of the project area, the slope continues towards the west, north and east.

The inclinations are most dramatic towards north and east and as such, the views in these directions are the most vast. In these directions a great overview is offered of the north riverbank as well as the river itself in the north and towards the city’s central areas in the east.

Towards the west the slope declines more gradually, and as a result this direction offers a view not as dramatic, but still vast with for example the landmark bridge Älvsborgsbron in the horizon.

Views in all directions contain various examples of architecture and structures that can be labeled as regional landmarks. In most cases, these are structures that extend above their surroundings, making them visible from various points in the city, and especially, from the hills.

In the images below some of these prominent landmarks are highlighted.

History of the area

The history of the area around Stigbergstorget in terms of settlement begins in the 1600’s, as a shantytown outside of the city border of Gothenburg. The location of a shipyard by the river at the time contributed a lot to the establishment of these informal settlements (Svensson, 2018).

The area’s growth accelerated in the 1700’s. Some of the houses was inhabited by wealthier groups such as ship owners, captains and doctors, and the preserved House Gathenhielm (Gathenhielmska huset) was an example of this. Much of the stock was of a simpler kind though, and housed poorer groups. During the 1900’s much of the earlier settlements, with some exceptions, were torn down in favour of newer buildings (Svensson, 2018).

The preserved buildings give an insight to the area’s vernacular architecture, constructed in a way that was logical and rational for their time, with wood as the prominent building material.
Sampling textures

Natural stone is arguably the material that characterizes the area the most. The site itself is made up of bedrock, covered in vegetation to a varying degree. However, the large parts of exposed stone makes it the most prominent natural feature. Stone appears broadly both in forms shaped by nature and in forms shaped by man.

The aim of the photogrammetric study was to examine a few examples of human intervention in the stone landscape.

Therefore, two examples of stone masonry structures as well as two locations in the blasted cliff wall were sampled via photogrammetry.

The scans were conducted with an ordinary smartphone camera, using approximately 20 photos per scanned texture. They were then converted into digital 3D-objects and the results were generally successful. The detail in the resulting geometry is high and corresponds to a large extent to the real textures. One of the two cliff scans (“Blasted cliff wall 2”) was less successful. The geometry of this scan is complex with many wrinkles and creases, which was difficult to capture with the scanning method used and number of photos.

The method for re-using these sampled textures as building elements was to use a digital fabrication technique. By routing molds with a CNC-mill, the stone textures are re-interpreted through the use of another material, concrete.

Location of sampled stone textures

Photogrammetry scans, rendered with concrete texture
Tabula rasa test of three scans as space defining elements in an interior

Tabula rasa test of blasted cliff wall as facade

Cutout from Stone masonry wall 1 casted with concrete

Cutout from Stone masonry wall 2 casted with concrete

Tabula rasa test of blasted cliff wall as facade
Regional landmarks

One clear aspect that contributes to our experience and depiction of a place is the landmarks that are found in this particular place. Landmarks stand out from their context in one or another way and there is often a story behind their existence and form.

Therefore, this part of the exploration of regional characteristics contains a study of a few examples of important landmarks in Gothenburg. With the views from the site as a starting point, landmarks were identified that are symbols of regional culture or heritage of the Gothenburg region specifically. All the landmarks that were chosen are visible from the hill of the site.

The landmarks are usually seen from afar and their shapes are known as silhouettes from a distance. In these experiments the focus was on identifying the landmark’s main constituents and with that information make a new independent object with a potential of finding new functions for certain elements. Therefore, the main actual functions in the landmarks were not depicted in the reinterpreted versions.

The chosen landmarks were interpreted in two steps. The first step was a translation from image and observation into a simplified version of the form. This step was about identifying the different main expressive constituents that these structures consist of.

The next step was about reinterpreting the simplifications into a new object, which carries resemblance with the original but at the same time becomes a different entirety. In other words, the strategy was to make the new objects somewhat distinguishable, but at the same time alter enough that they don’t become too similar to the original. This was done by duplicating, scaling, displacing and exaggerating some of the elements in the object in order to reach a new form. Re-interpretation was done without the project site in mind, keeping an open mind on what they could turn into.

The reinterpretations were done with fairly simple geometric forms as building blocks.
Shipyard crane

The crane in the photo is one of many remnants left from the shipbuilding industry in Gothenburg. They stand by the river as reminders of this heritage and the image of them is certainly associated to the Gothenburg region.

The crane’s main constituent can be said to be its steel skeleton which made the crane able to serve its primary function. Secondly, the skeleton holds a container of space which humans are meant occupy, in order to operate the crane.

In the reinterpreted version of the crane the primary function is given less focus, whereas its feature of holding space containers is emphasized. The space container was therefore duplicated and the surrounding structure was adapted to hold these, while keeping the overall shape of a crane.

Expressive materials: Blue and red painted steel
Âlvsborgsbron spans between two hills and bridges over the river Göta älv, connecting Hisingen to mainland Gothenburg. The scale and height of this structure makes it visible from many parts of the city and its position at the river outlet gives the effect of entering a gate when arriving to Gothenburg by boat.

The bridge is a structure mainly made out of concrete and steel, where the light green painted steel trusses are probably its most prominent feature when seen up close. The large concrete frames are important for recognizing the bridge from farther away.

When reinterpreted, the large concrete frames on the ends of the bridge were duplicated along the bridge, encapsulating a hollow cuboid. The steel trusses were taken out of context as load bearing elements and were instead used as subdivided window frames in an imagined curtain wall facade.
Ship
- Stena Line

The Stena Line passenger ships are a recurring topic of public debate, much due to their docking location in central Gothenburg. The adequacy of this is questioned as these large central areas could be used for other things.

Nevertheless, the image of these ships, when docked or on their way in or out of the city, have been apparent in the city for many years, and although not a structure fixed to the ground, they can indeed be considered as known landmarks in Gothenburg.

The simplified ship was made up of an overall shape that together with some key features makes it distinguishable as a ship at a rough scale. These features are the large chimney on top of the ship, the command bridge in the front with its ribbon window, as well as an array of smaller windows on the sides of the ship, making clear that a passenger ferry is depicted.

Departing from the simplified depiction, the ship was shortened and the front was removed, in order to make the reinterpretation into more of an object of its own. The chimney and the round windows were merged into an array of forms on the top of the reinterpretated object, and could serve the function of roof lights in a building.

Fig 17: Stena Line ship

Expressive materials: White, red and blue painted steel
Monument - Sjömanshustrun

Like most of the other landmarks, the memorial monument of Sjömanshustrun is linked to the fact that Gothenburg is a city with a strong harbour heritage. It was constructed in memory of trade ship sailors who perished at sea during the first world war, and it is a very distinguishable Gothenburg symbol.

The simplified version of the monument is quite reminiscent of the original, except for the fact of the actual statue on top of the monument. Apart from this, the simplification is made up of a column standing on a base, crowned with an undefined form on top of the column.

In the reinterpreted version, the scale of the different elements were changed in order to create a new object, and as such, the column’s elongation was reduced and the undefined statue was enlarged. Furthermore, the base was split in half and in the gap a new element was inserted, which was made up of small columns of brick and strips of copper.

This reinterpretation turned out to be the least successful one, probably since it is hard to imagine it at any particular scale due to the lack of elements such as windows.
Design proposal
A library

As the site is regarded as valuable land, the logical choice was to work with a building typology with which the citizens of Gothenburg would continue to have access to the site, i.e. a public building. A library is a great example of this, a non-commercial building that can serve the function of a public living room, open for all citizens to spend time in. Constructing a public library on the site is therefore seen as a democratic gesture and a way to cultivate the site and its characteristic features for the public to enjoy.

Conveniently, the public district library of Majorna wishes to relocate to the area around Stigbergstorget (Engelbrektsson, 2021). This is within close proximity to the site, and therefore there was further reason for working with a public library as a typology.

Design strategies

Besides the strategy of terracing the building, as a way to respond to the site’s topographic gradient, the following design strategies were used as design criteria in order to make the building envelope fit within the site and make use of its specific characteristics.

- Connecting to existing pathways and stairs bordering the site.
- Aiming for indirect lighting of the interior, and avoiding too much direct sun radiation:
  - Through the use of rooflights
  - By opening up the building towards north and closing it towards south
- Maximising views downhill where they are the most vast
- Avoiding the steepest inclines, and departing from the more gentle slopes.

Room sequence diagram
Site plan - 1:1000
Contextual elements

In the exploded axonometric on the opposite page, contextual elements used in the building are highlighted.

Circulation elements within the building are realized through the use of red painted steel, referencing to the shipyard cranes.

Window frame subdivisions within the building are given their shape from the sampled steel trusses in Älvsborgsbron.

Facade elements, as well as some interior walls are casted using cutouts from the sampled stone textures from the area.

Fig 19: The exposed wooden roof construction is a reference to the area’s vernacular wooden architecture.

Roof lights in the building take their form from the array of chimneys in the reinterpreted ship.
Exterior perspective showing stone textures on the north-eastern facade

Exterior view from east.
1. Entrance
2. Reception
3. RWC
4. WC
5. Staff room
6. Staff/goods entrance
7. Staff WC
8. Sorting room
9. Kitchen
10. Loan/return station
11. Café
12. Terrace
13. Magazine section

Entrance level - 1:200
1. Main section
2. Children’s section
3. Group room

Window on the upper level framing the Sjömansfustran monument
1. Main section
2. Study spaces
3. Computer area
Study spaces with views over the city on lower level

Stairs from lower level up to entrance- and upper level
Views towards northeast from the second lower level

1. Main section
2. Conference room
Reading spaces on the second lower level

Window on the second lower level with sampled steel trusses as window frames.
Facades

Facade north-east 1:200

Facade north-west 1:200

Facade south-west 1:200

Facade south-east 1:200

Facade south 1:200
Reflection

Reflecting on the outcome of this thesis project, I ask myself the question if the resulting building design strikes me as contextual. And the answer is that it does. However, I am in a biased position as author of the work and perhaps not everyone would agree.

Perhaps it is not elements from reinterpreted landmarks that one would find as main reasons for the work being comprehended as contextual. It could instead be for reasons such as how the building is situated in the topography, or that the concrete blends well into the stone landscape. Regardless whether the origin or reason for certain design features in the building are relatable by the observer or not, the method served as an effective design strategy.

There are after all many ways to reference to the context, and what is perceived as characteristic for a place will most likely vary from person to person. In the example where Norberg-Schultz named sand as the most characteristic feature of Khartoum, would a Sudanese agree with him?

A balancing act throughout the process has indeed been how explicit the different gestures to context should be. The building is essentially a result of mixing a number of different ways of relating to context and characteristic elements from the area, and despite the risk of the result becoming a chaotic mess, it does feel well balanced in the end.