

RESEARCH THESIS

A Critical Regionalist Approach Towards
Balancing Tradition and Modernity in
Housing in North-East Morocco



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Preface

My fascination for housing in Morocco started by seeing the spatial differences throughout the years while travelling to this country. What surprised me the most is the great amount of mass housing projects, that are becoming more common each year, without the projects being designed for their context. This present-day architecture, which can be seen in other African countries, is problematic because it struggles with fitting in the environment and the culture of the country.

These large scale projects in non-western countries often have a lot of similarities with architecture in western countries since they are mostly designed by foreign companies or inspired by western architecture. There is often a misunderstanding that western architecture is equivalent for modernism and progress, resulting in a weak relationship with the region they are actually build in. This problem made me ,firstly, interested in vernacular architecture and the way this architecture that is not created by architects, but by the local people, embraces the region it is built in. Because it has been a result of thousands of years learning to build and construct in a particular way, this architecture has embedded sustainable elements that are nowhere to find in the large scale housing we see today. Nevertheless vernacular architecture was established by the people, not by architects. Today, in the 21st century, architects are educated to build and it is therefore more common that they use their knowledge to actually contribute in a positive way to the built environment. This makes vernacular architecture an aspect of the past which can be used to gain information but not to laxly reproduce, we are now able to use our knowledge to create sustainable architecture without the necessity to go back to the time when buildings where made by the people inhabiting a certain region. This way of thinking fed my interest for the notion of critical regionalism, regionalism is used to explain the importance of a region for the design, and a critical approach is needed to avoid being shallow, nationalistic and populist about the term regionalism and always have a critical approach towards the relation we create with the context. The first step is acknowledging that in a non-western society tradition and modernity are often seen as two extremes who do not go together ,for example stated by the writer Tahar Ben Jelloun:

"In the Arab world, since the cultural disruptions caused by colonization, there is no longer a link between the cultural habits of peoples and the ways of thinking and creating of modern intellectuals. They are two separate worlds."¹

Tahar Ben Jelloun - French/Moroccan writer

¹ UNESCO, "Interview: Tahar Ben Jelloun," *The Unesco Courier* August-September(1991).

After acknowledging this problem we can start with the search for a way to bring these two extremes together and to show that it is indeed possible to progress without losing identity. While researching the notion of critical regionalism and its role in non-western countries, for example Morocco, I have to keep in mind that even though I have Moroccan origins, my upbringing and education in a western country, The Netherlands, might put me in a position that is closer to the western society than the Moroccan. Therefore my goal in this research is introducing a way of building that encourages architects from all over the world, to have a critical approach on designing present-day housing projects in non-western countries. Resulting in a society that builds on itself, while using universal knowledge.

In this thesis I will discuss the notion of critical regionalism and the importance of this notion regarding projects in non-western countries. Authors have been discussing this notion for the past 35 years, and even before using the terms critical and regional together, they gave different explanations about the sociology behind an approach that is pleading for a better interaction with the context. In the second phase of this graduation, I am focussing on designing a housing project in North-East Morocco, particularly in the city Berkane which is the birth place of my father. This will be a case study to show that Morocco² needs an approach that is focussed on finding the balance between tradition and modernity, resulting in architecture that fits in its context in the best way possible.

I want to thank the teachers of the Explore Lab at the TU Delft for giving students the possibility to turn their fascination in their graduation project, especially my mentor Nelson Mota and my BT mentor Jan van de Voort. I want to thank my family for holding on to their culture while residing in non-western countries and I would like to thank the residents of Berkane for helping me retrieve information about the different types of housing and the role architecture plays in their daily lives. I hope this graduation provides an example as a project that searches for balance in different aspects and motivates people to never stop aiming for this balance in every aspect of their lives.

Salima Benaissa

² Even though this case study takes place in Morocco, housing projects all over Africa and the other non-western countries pose similar questions regarding the relation of the building with its surroundings.

Introduction

The built environment has been dealing with reciprocal influences from the beginning of time, cultures have been inspiring each other and are using and copying elements, which resulted in the architecture we know today. Generally speaking we could say that western influences in non-western architecture are mounting up as a cause of the universalization, we often see that everything that comes from the West is seen as an equivalent for developed and modern. The current architecture in non-western countries is the result of this universalization, materials and building types are implemented in a region for which they were not initially planned. This resulted in an architecture that goes from being inspired by vernacular and local ways of doing to copying the West and implementing its architecture in the built environment. If this conduct of copy pasting architecture holds forth in the future, the risk of losing culture and identity of a place is very high, in order to prevent this from happening we need to look for a solution as soon as possible. This tension between going back to the core of a culture and becoming modern is a crucial part to understand, because finding a balance between the two can create an architecture that is not only up to date, but also designed for its region. If the balance tends to fall to the modern, universal side, there will be a fear of falling into a hegemonic architecture, where the West is influencing the built environment in the third world, we can see this back in recent Moroccan housing projects. Likewise, if the balance tends to fall to tradition and regionalism, it will be most likely that this jeopardizes the growth of a certain culture.

The notion of critical regionalism has been answering this tension between modernism and tradition since it was first used approximately 35 years ago. I will be discussing the road towards the use of this notion and the relevance it has today, in the 21st century. After this I will discuss the difference between the western and non-western countries in this discourse and how these two have influenced each other.

The position of Morocco will be determined by examining the history of modern influences and how the locals reacted to these changes in the built environment, especially during and after the French Protectorate was established. Afterwards the viewpoint of present-day Moroccan architects will be examined in order to understand what can be done in the future to create a balance between modernity and tradition in Moroccan architecture.

In order to understand the current housing problems in Morocco, it is necessary to evaluate the existing housing types and both their pro's and con's. These housing types will give a clear insight on how architects and inhabitants dealt with the changes through time and show how this change influenced their way of living. After this research on typologies in the North-East of Morocco it should become clear what should change in order to find the balance between modernity and tradition.

The research on the notion of critical regionalism is essential to develop a way towards improving these problematic issues and embracing aspects of the site and local needs in the same context. It will also help to formulate the position of Morocco in this architectural discourse and the road we have to take to make it grow in the future. This research should form a base for the design project that balances different aspects and does not neglect process while maintaining traditional aspects. This is one of the numerous ways in which one can research a way to balance modernity and tradition and should be a motivation for other architects to look for progress without losing one's identity.

The Road Towards Critical Regionalism

Critical regionalism is an approach to architecture. Unlike some architectural styles, it is impossible to look for certain aesthetic factors that can be seen in architecture that was developed while using a critical regionalist approach. Aesthetic features can look futuristic or primitive, while both using the same approach. Nevertheless, the notion of critical regionalism came about after the domination of different architectural languages, this evolution of the notion of critical regionalism is important to understand. The term was first used by Alexander Tzonis and Liane Lefaivre, in the late 70s/early 80s, and was also used by Kenneth Frampton during that period, who are known as one of the most influential writers about critical regionalism. As a reaction to modernism and postmodernism, critical regionalism emerged as an approach that is based on modern principles but uses the locality as a begin.³ These styles were known for encouraging the universalization, which made architecture look alike, despite the difference of regions it was built in. After the fast industrialization and the establishment of a universal style, architects were looking for a way to balance modern with traditional.

In order to fully understand the meaning of critical regionalism, it is of great importance to understand the events in history that caused it to emerge. In his introduction for the book *Critical Regionalism*, Alexander Tzonis speaks about the beginning of regionalism and the events in history that made this notion relevant. The term regionalism is often linked to the words primitive, chauvinistic, ethnocentric, popular and nationalistic. This negative trait that haunts the term regionalism started with Vitruvius, he stated that the region in which someone resides is elementary for being successful⁴, the Romans lived in a 'temperate' region with a temperate climate, therefore they claimed to be superior to the other cultures of the North and the South. This resulted in an universal architecture that has been used for years as the only way of doing.

³ Liane Lefaivre and Alexander Tzonis, *Critical Regionalism: Architecture and Identity in a Globalized World* (Munich: Prestel Verlag, 2003).

⁴ Ibid., 12.

Even though this universal style was created in one region, it was copied and used in regions that had no similarities in climate and context with the one it was initially meant for.

After Vitruvius, the first politically conscious regionalist building also came about in Rome, the Casa dei Crescenzi. In the beginning of the years 1000 the situation in Rome was incomparable with the situation during Vitruvius' lifetime, being a city of only 30 000 inhabitants. The architecture is based on ancient Roman buildings, and mixed with different antique ornaments, built in an environment which consisted of only classical buildings, this building was the only one that used ancient Roman fragments in the environment. This aspect of using historical references that are strongly linked to the site, make it a regionalist building. Crescenzi himself named the design a building of *renovatio*, which meant that it would go against the pope and the emperors, who were aiming for globalization.⁵ During that period in time, it was very uncommon to use different building styles in one design, this itself was a revolution of the architect, protesting that it belonged to a certain style.

The first wave of regionalism came about as a reaction to the rulers, the people were fed-up with the current state of affairs and decided to revolt against the power of the rulers. Later we can see that regionalism is mostly gaining popularity to oppose certain people or movements that are in power. England in the end of the 17th century is an example of this, they pleaded for less power for the king and more influence on the elections on who should be in the Parliament. This made it possible that there was an outcome from the centralized model and enabled the country to give more power to lower classes who aimed for distribution instead of centralization.⁶ This resulted in the English garden style, adapted to the site it is built on and dissimilar in every case. Even though it was a style that resulted as a counteraction to the centralization, other countries started copying this style. Eventually causing the negative undertone the term regionalism has today, styles that are used to increase popularity. The French elite used this English regionalism as a way to escape the rules and to entertain themselves, for centuries they have been holding on to the rules of classicism and this was their only way of doing, therefore regionalism was used as an escape. In the second half of the 18th century, the writer and philosopher Jean-Jacques Rousseau spoke out on this matter by saying that France needed

⁵ Liane Lefaivre and Alexander Tzonis, *Architecture of regionalism in the age of globalization: peaks and valleys in the flat world* (Routledge, 2012). 16.

⁶ Ibid., 34.

a different way of doing and that they should distribute their power to create regional communities in order to prevent the present direction towards centralization of the state from taking place.⁷ This thought was fed by different events in his life, one of them was his promenade in Montpellier, where he perceived a strong line between the traditional cottages and the newly build mansions.

*He argued for the elimination of all inequalities and of the privileges of any central place such as Paris. Also, he advocated a sweeping redefinition of the institutions of property and the state as inherited through history and a return to natural conditions.*⁸

This way of thinking illustrates the increased interest from a centralized society towards a society that is based on individuality and respecting the characteristic of different places.

The second part of the 19th century is marked by the strong occurrence of colonialization, intensifying the universalization of the world seeing that the colonialists brought their western culture and architecture to the colonized countries. During this time the idea of *Heimat* came up in Germany, the word for homeland in German. This term *Heimat*, was later used by the writers of the book *Vernacular Modernism* Maiken Umbach and Bernd Hüppauf, to describe the particularity of a place.⁹ They used the word to illustrate the importance of the vernacular, which was for them the characteristics of a place, in the context of a modern way of approaching architecture. This was also a reaction on the Americanization of the country and growing interest for local tradition. Unlike the term used by Umbach and Hüppauf, the meaning of *Heimat* in this period of time was merely regionalist and nostalgic, recovering the feeling of being home.¹⁰ This also had a negative undertone, preferring one race over the other, in this case especially the German race. This is called the *Heimat*-doctrine and

⁷ Ibid., 53.

⁸ Ibid.

⁹ Maiken Umbach and Bernd Hüppauf, *Vernacular Modernism: Heimat, Globalization and the Built Environment* (California: Stanford University Press, 2005).

¹⁰ Lefaivre and Tzonis, *Architecture of regionalism in the age of globalization: peaks and valleys in the flat world*: 96.

several German writers and artist where influencing Nazi thoughts with their works, giving the term *Heimat* a negative undertone. Germany was not the only country that faced nationalist movements, one of the faces that describes the French branch of extreme nationalist was Hubert Lyautey, who was living in the protectorate of Morocco in the beginning of the 20th century, being a part of the military.¹¹ He was behind the bombardment of Casablanca in 1907.¹² Even though he shared fascist and extreme right believes, he valued the regional culture of Morocco, though it can be questioned if he did this for his own sake or in terms of gaining popularity of the local people. He was also responsible for making Henri Prost head of urbanism in Morocco. This was the beginning of implementing French laws, regulations and politics in Morocco, including the regulations in the planning of traditional Moroccan *medinas* and new developed areas. resulting in a step forward for the public interest and a step backwards for local tradition.

This influence was not only one-sided during the colonial period. Different expositions in the end of the 19th century enabled people to get in contact with foreign cultures in recreational and scientific ways. The scientific ways were focused on resources retrieved from the colonies whereas the recreational aspects of the expositions could go as far as importing a complete African village with 400 inhabitants to the *Exposition Universelle de Paris* in 1873. These different types of regionalism illustrate the bilateral character of the term, having both a negative and a positive side.

Approximately sixty years later, the International Style was born and marked the beginning of the road towards modernization. One of the main criticizers of this style was Lewis Mumford, a writer that wrote about regionalism at the end of the 19th century.¹³ Lefaivre and Tzonis explain his views on regionalism;

¹¹ Micheal Duffy, "Who's Who - Hubert Lyautey," (2009), <http://www.firstworldwar.com/bio/lyautey.htm>.

¹² Lefaivre and Tzonis, *Architecture of regionalism in the age of globalization: peaks and valleys in the flat world*: 102.

¹³ Ibid., 112.

Mumford tried to define what regionalism meant in the present day. He warned that it was not a return to the traditional picturesque or Romantic regionalism in search of the 'rough', the 'primitive', the 'purely local', the 'aboriginal', 'the self-contained'. Neither was it in conflict with the 'universal'. He argued that regionalist architecture has to overcome the 'deep unbridgeable gulf between the peoples of earth',...has to help people to come in terms with the 'actual conditions of life' and make them 'feel at home'¹⁴

This was one of the first critical thoughts about regionalism and opened a new door to the use of this term in the future. Even though it remains to have aspects traced back to earlier forms of regionalism, like the place of home, *Heimat*, it adds on the table that it does not conflict with the universal and it is adapted to the actual conditions of life. This explains the relation between tradition and universalization, which always have been two extremes with no interest of combining the two, and are now plead to work together to reduce the gap created throughout the years.

The years following, the interest in regionalist architecture began to increase, especially in America, where the search for a 'friendlier' architecture was taking place. Firstly this resulted in a higher interest for vernacular architecture, secondly the term sustainable became relevant. One of the main places where this happened was the MoMa in New York, giving place to exhibitions dedicated to modern ways of thinking, but also questioning the modernity of regionalism.

After the second world war, regionalism became increasingly popular under Americans while exploring contemporary architecture in Latin America, especially Brazilian Architecture. The Americans claimed that Brazilian architecture was better adapted to the region than American architecture, mainly in the 1940s & 50s.¹⁵ With region they meant the design of the building according to the local climate, this too was a part of an exhibition in the MoMa. The end of Modernism can be marked by an event organized by the MoMa, called 'What is happening to Modern Architecture?', during this meetings several post-war architects were invited to talk about the future of Modern Architecture and how regionalism is a threat to the development of Modern Architecture. Together with the upcoming of the CIAM, this post-war

period started to become more and more anti-regionalist. Especially remarked in Brazilian Architecture, where architects like Niemeyer and Bo Bardi were illustrating a way of building where the national identity was being centralized. Contradicting the Modernist movement in the North of the continent, they were told that their regionalism was in fact their weakness.¹⁶

All these events triggered the upcoming of regionalism in education and urban planning, the organizer of the event in the MoMa, Elizabeth Mock, was one of the persons speaking about the importance of regionalism.

Regionalism consist in a freedom to adapt to climate without being tied to historical formal prototypes, and to use local materials.¹⁷

Coming from a Modernist viewpoint, she acknowledges that regionalism does not necessary means that traditional aspects should be used, but the focus is laid on the relationship with the climate and the way designs are based on these local climatic aspects. Nevertheless, this opinion about regionalism remains mainly modernist because it does not speak about the importance of the local tradition and identity, since the focus is laid on adapting to the climate and therefore environmental sustainability.

Contradicting to Vitruvius his ideas, the architect Paul Rudolph stated that mankind originated in the South and not from this 'ideal' climate found in the West. He was a tropical regionalist, along with other architects of his time pleading for more interest for locality, tradition and cultures in architecture.¹⁸

With the decline of colonialist powers, the colonialists were trying to keep their mark on those countries trough creating architecture that represents this. This was done by making embassies but also by allowing (touristic) companies creating complexes. One example of a regionalist building abroad is Louis Kahn his design proposal for the consulate of the USA in Luanda, Angola. Although it was never built, it illustrated how Kahn tried to embed the local culture in the design. It was based on his own perceptions of Angolan

¹⁴ Ibid., 117.

¹⁵ Ibid., 119.

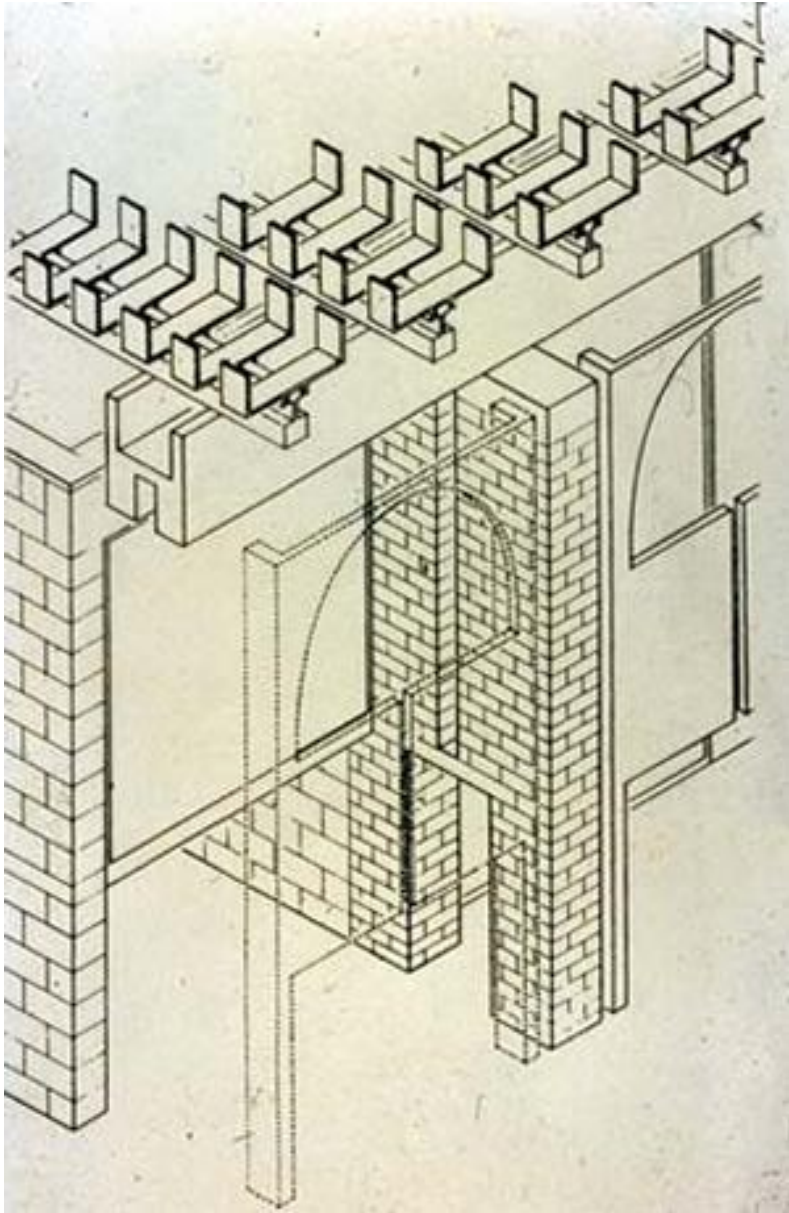
¹⁶ Duanfang Lu, ed. *Introduction: Architecture, modernity and identity in the Third World, Third World Modernism: Architecture, Development and Identity* (Routledge, 2011).

¹⁷ Lefaivre and Tzonis, *Architecture of regionalism in the age of globalization: peaks and valleys in the flat world*: 133.

¹⁸ Ibid., 136.

ways of living, direct sunlight was avoided in daily activities, in exterior and interior. In his design he used this fact to create a comfortable inner climate concerning light, wind and sun by designing walls in front of openings in the wall and a particular roof type that creates an agreeable inner climate.¹⁹ Kahn used a traditional way of using the building, avoiding direct sunlight, not only to answer the needs of the users but also to improve the sustainability of the project, mostly environmental and social sustainability.

¹⁹ Ibid., 144.



Design proposal for USA consulate Luanda, 1961, Angola by Louis Kahn Kahn analyzed traditional ways of living in Angola, and he concludes that direct sunlight was avoided in daily activities, in exterior and interior. In his design he used this fact to create a comfortable inner climate concerning light, wind and sun by designing walls in front of openings in the walls. He also created a roof type that created an agreeable inner climate.



Säynätsalo Townhouse, 1952, Finland by Alvar Aalto The townhouse consists of buildings that are oriented towards a raised court, the openings in between enable the connection with both the court and the landscape. Not only is this design embedded in the surroundings, it is based on the sense of community, that was lost after the second world war.

Even though the design initially had modern viewpoints, the way Kahn referred to tradition in the use of the building is typically regionalist. One of the architects that were sharing these regionalist viewpoints, was Alvar Aalto, although he admired classical architecture, he never saw it as a canon, he thought that the most important aspects of architecture are the identification with the site, local ways of living, climate and materials.²⁰ Nevertheless, this did not make him an nationalistic regionalist, which was a common way of thinking in Finland before the second world war. Lefaivre and Tzonis mentioned about him:

*While respecting the idea of the region, across the dimensions referred to above (Nationalist Regionalist in Finland prior to the second World War), Aalto kept a critical distance...*²¹

He took an individual position in this time where regionalist were opposing modernists, finding himself in a position where he valued the importance of the context in a design, without grasping to the traditional ways of building. In 1952 his townhouse in Säynätsalo was completed, this design illustrates his critical position. Aalto depicts the importance of community, after the site and surroundings were heavily damaged during world war two.²² The buildings are orientated around a lifted court and has openings between the buildings to keep a connection with the court and with the surrounding landscape.²³ In terms of material, the townhouse blurred together with the surroundings, the result of using similar colours. The design process started with his fascination for classical architecture, but focussed on a thoroughly analysis of the terrain. This was translated in a design that is embedded in its location, not only in terms of landscape and material, but also by providing an answer to post-war problems though the importance of community. Next to Aalto, a large group of Brazilian architects also took a critical stand towards regionalism, not basing their designs on copying traditions, but learning from them to develop an approach linked to present time. This was not developing randomly, it was mostly a

²⁰ Ibid., 151.

²¹ Ibid.

²² Lefaivre and Tzonis, *Critical Regionalism: Architecture and Identity in a Globalized World*: 66.

²³ Marc Treib, ed. *Aalto's Nature*, Alvar Aalto: Between Humanism and Materialism (New York: The Museum of Modern Art, 1998), 60.

reaction to the globalization and the increasing power of the USA, which influenced Latin America the most.

Regionalism was not only responsible for changing ways of doing in architecture, but it also helped architects to develop new products. Le Corbusier is one of the main architects that made use of the *brise soleil* or louver in architecture, later introduced in the different continents where they were used as an appliance to improve the inner climate of a building.²⁴ This sustainable effect that louvers bring with them, were in fact a regionalist discovery and show that sustainability in a design comes from a regionalist viewpoint. A remarkable evolution in the period after the second world war.

In the second half on the 20th century, the Indian architect Charles Correa was using vernacular precedents to integrate them within his own structures.²⁵ Although he was using vernacular architecture as an inspiration for his architecture, it also triggered him to do experiments with highly innovative architecture. In history we saw that these two extremes often not work together, but in fact they are based on the same under laying thought, creating architecture that is focussed on the adaption to the local climate. In Ahmadabad stands one of his projects, the Tube House, finished in 1964, providing openings in the house to allow the hot air to flow out and in the mean time to cool the building. The building configuration is based on traditional configuration, a mezzanine that is used as sleeping platform and the kitchen being the centre of the dwelling. The combination of traditional aspects with clever ways to improve the inner climate, has made this project regionalist with a critical position of Correa.

Important is the difference between the regionalist movement before and after the second world war. As already explained, the pre war regionalist movement had used racism and nationalism to show the importance of the region, which eventually caused the second world war to take place. This negative position is rejected after the second world war, where the focus was laid on an architecture that is made for a specific region, since post-modernism was mainly focussing on creating an universal way of building. This idea can be traced back to the architecture was influenced by the CIAM, even though it was mainly focusing on modernism, regionalism had been a topic of discussion, even when creating modern architecture, it has to fit in the context.

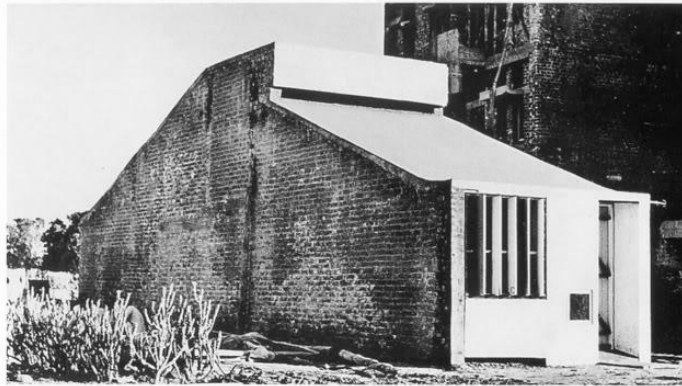
²⁴ Lefaivre and Tzonis, *Architecture of regionalism in the age of globalization: peaks and valleys in the flat world*: 160.

²⁵ Ibid., 163.

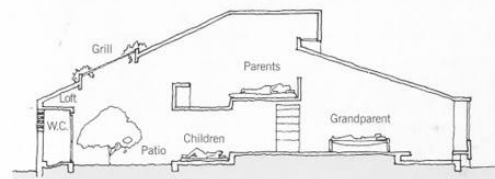
TUBE HOUSE

1961-62
Ahmedabad

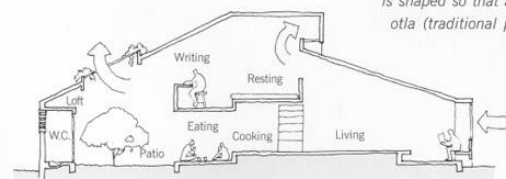
In 1960, the Gujarat Housing Board held a national competition to encourage new ideas for low-income housing. The program specified walk-up apartments, but we found that by using these long tube houses we could get the required density, as well as much larger living spaces for each family. The Judges, Jane Drew and Achyut Kanvinde, awarded first prize to our entry – an early example of energy-passive architecture. The heated air rising along the sloped ceiling, escapes through a vent at the top. Fresh air, drawn in to replace it, sets up a convection current of natural ventilation – controlled by the adjustable louvers next to the entrance door.



Prototype unit



Section (at night)

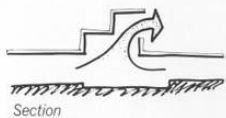


Section (during day)

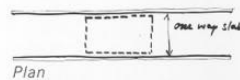


Plan

The profile of the mezzanine is shaped so that at one end it forms an *otla* (traditional platform) for sleeping.



Section



Plan



Tube House in Ahmadabad, 1962, India by Charles Correa The roof is shaped such that cool air is naturally drawn through it, leaving via a vent close to the apex of the roof. It is not only based on sustainability, but also an answer to creating low-income housing, since it eliminates the use of expensive elements like windows and the building material is available in the surroundings.



Nid d'Abeille in Casablanca, 1952, Morocco by George Candillis, Alexis Josic and Shadrach Woods Left shows the complex after completion in 1949 and right shows the state today. The architects said not to have interest in copying vernacular architecture, although they used high density of the *kasbahs* and referred to the open space as an atrium.

In Morocco, CIAM influenced architects had the opportunity to create a substitution for the slums in Casablanca, George Candilis, Alexis Josic and Shadrach Woods were the ones working on the Nid d'Abeille project. Coming from a modernist viewpoint, they had no interest in the use of vernacular forms, whereas they used vernacular principles to adapt the building to the region.²⁶ Their project was a hybrid of the old *kasbahs*, which were providing high density housing, and industrial ways to build. Even though they claimed that they had no interest in recreating obvious aspects of vernacular architecture, they used the high density and the principle that every house has an atrium, in their design. This eventually did not work out, and the dwellers started to adapt their design to their own needs. Even though the architects designed a dwelling type that was supposed to fit in with the traditional ways of living of the majority of the Moroccan Muslim population, the dwellings were always changing together with the needs of the dwellers. Architecture was not only influenced during the colonial period, but remained present after independence, although more in a complicated and ambiguous way.²⁷ Lefaivre and Tzonis say about this period after the colonialization:

*The conditions of the post-colonial states were not uniform, neither were the goals of their architecture. Most of the former colonial countries were located in the tropical or semi-tropical Vitruvian 'region' facing common environmental problems, and, as we have already seen, architects developed a regionalist approach, focussing on controlling the microclimate by recruiting local precedents.*²⁸

This regionalist approach was not only visible in architecture, but also in landscape design. The Greek architect Dimitri Pikionis was studying the vernacular of the Greek landscape and used this to create a path, which he thought is the perfect response to globalization since this was threatening the Greek ecology and sense of community.²⁹ A path is connecting places together and is an experience through the path itself and the region around it, it is not only literally speaking a movement, but it also brings people in movement. This

²⁶ Ibid., 168.

²⁷ Lu, *Introduction: Architecture, modernity and identity in the Third World*, 16.

²⁸ Lefaivre and Tzonis, *Architecture of regionalism in the age of globalization: peaks and valleys in the flat world*: 171.

²⁹ Ibid.

thought behind it made it one of the most critical projects in the history of regionalism. From this moment on, the notion of critical regionalism came about, triggering other architects in developing an opinion about it. The Japanese architect Kisho Kurokawa gave his own definition of this term: a regionalism that is self-examining and self-questioning.³⁰ With this he meant that regionalism itself is something that can be developed, that can improve in time.

From this moment on, critical regionalism was a term that was widely used to illustrate the critical approach that was needed towards regionalism. Even though it was first used in the beginning of the 80s of last century, the idea of a critical approach has always been present, formulated and designed on different ways. Throughout the years, the term regionalism was developing next to modernism, often forgotten that these two are not necessarily opposites of each other, but should work together to answer present-day questions.

At the end of the 20th century global organizations and institutions mounted up, together with a strong idea of universalization, and asked for a reaction in critical regionalist way. Unlike previous architects did, the vernacular was not the main field of interest in this era, where the technological developments were high. This resulted in architecture based on merging with the region by means of creating innovative architecture and focussing on aspects like wind, light and vegetation.³¹ Architects that were part of this era are, among others, Renzo Piano and Ken Yeang, the latter famous for creating bioclimatic skyscrapers.

Regionalism has had its popularity in two periods of time, before and after the second world war, both as a reaction to an universal way of building. The latter being more focussed on the positive aspects of regionalism, resulting in the first use of the term critical regionalism. Critical regionalism was not only an approach towards architecture, but also found common ground in landscape, whereas previous architectural projects could be constructed on the one site while damaging it, critical regionalist pleaded for a 'dialogue' with the site, acknowledging that one site is not similar to another and each need a different approach. This relationship could be interpreted in different ways, going from traditional ways of doing of one people to the importance of using technology to make the design fit in the site. What they had in common is that critical regionalist all looked for a perfect way of balancing regionalism with the

³⁰ Ibid.

³¹ Ibid., 182.

advancement of mankind. Even though it is said that critical regionalism had lost popularity after the end of the 20th century, we could also say that it has never lost popularity, and in fact, existed even before the term was openly used, since architects never stop looking for the balance between two extremes.

Critical Regionalism Today and Tomorrow

Today, in the 21st century, the term critical regionalism not as widely used by architecture critics as it was at the period when this notion was first used. Nevertheless, the reasons why this notion was introduced is still relevant nowadays, we see architecture mainly in the 'less' developed areas of the world, rising up without any relation with the region and tradition. This present-day issue needs a solution that elucidates how architects in the 21st century should approach a design project, that is looking for a balance between modernism and tradition. Emerging from a world where universality and modernism was rising, regionalism was criticized for being only one sided. Throughout the years we noticed this regionalist way of thinking produced different ideas on why and how regionalism should be adapted to the present-day. When using the term critical regionalism, we could even argue that it never lost popularity since it is not a style, but an approach, not attached to a certain aesthetic image but focussed on the main goal, how to make a present-day design fit in their context.

The definition by Frampton of the term critical regionalism is based on a regionalism that 'depends on a connection between the political consciousness of a society and the profession of an architect'.³² What is typical in his eyes, is that a critical regionalist way has a strong desire to realise an identity, which was lacking in the ruling architectural styles in the late 70s and early 80s of the previous century. Critical regionalism seemed to be the only solution to the creation of an universal style, it enabled the architect to create a *place* instead of a *space*.³³

Today, Frampton explains how modernity and universalization caused society to stop their critical thinking and how this eventually contributes to the world going to waste, only by following this universal West and thinking that this

is the only solution to create a developed world.³⁴ He compares this blindly following of the universal culture with *star* architects that are building all over the world to create architecture that functions as an icon, the *Bilbao effect*, focusing on the creation of a spectacular show by using a sensational aestheticism. In history we have seen that after a wave of an universal architecture, not fitting into the context, regionalism has been rising as a reaction to this. Since this is happening today, in the shape of the *Bilbao Effect*, we could say that there is a new wave of architecture in the world that is based on capitalism and popularity, iconic architecture that only focuses on 'showing off'. Thirty years ago Frampton referred to this phenomenon as Populism, back then vernacular architecture was used to refer to populism. Today, the vernacular is still used in certain cases to increase the popularity of a certain architect or firm, mainly focussing on the aesthetics of the vernacular to cause a certain sensation and nostalgic feeling towards the audience.

In the 21th century universalization is coming back in the shape of popular iconic architecture, the problems that come with this universal style are reality. Paul Ricoeur mentions the term universality in his essay about the tension between universal civilization and national cultures.³⁵ He takes an optimized position towards modernization.

*Technical revolutions mount up and because they do, they escape cultural isolation.*³⁶

He tells how this modernizing world is using technology to grow and how it uses technology to make the world more universal, as soon as one technical discovery is made or discovered it spreads the whole world and we can all use it to grow, some might be faster in their growth than others. There are also downsides of technology, if we only look at the use of air-conditioners in countries with a high average temperature we notice that architecture often embraces the use of these machines, because the option to add mechanical features to the building is available, the necessity of making a sustainable

³² Kenneth Frampton, "Prospects for a Critical Regionalism," *Perspecta: The Yale Architectural Journal* 20(1983): 184.

³³ *Ibid.*, 162.

³⁴ Kenneth Frampton, "Towards an Agonistic Architecture," *Domus* 972, no. September (2013).

³⁵ Paul Ricoeur, "Universal Civilization and Natural Cultures," in *Architectural Regionalism: Collected Writings on Place, Identity, Modernity and Tradition*, ed. Vincent B. Canizaro (New York: Princeton Architectural Press, 2007).

³⁶ *Ibid.*, 44.

design is put on the background. Since an universal style is being used to build and to design these buildings, context and climate become less important. Nevertheless, technology can and should certainly be used while designing because we are living in an era where technology can help society and certainly the built environment, in blending in with the region. Ricoeur acknowledges that this advancement can also have a negative impact on the world:

*The phenomenon of universalization, while being an advancement of mankind, at the same time constitutes a sort of subtle destruction, not only of traditional cultures, which might not be an irreparable wrong, but also of what I shall call for the time being the creative nucleus of great civilizations and great cultures, that nucleus on the basis of which we interpret life, what I shall call in advance the ethical and mythical nucleus of mankind.*³⁷

Being an optimist about modernisation, Ricoeur mentions that the value of tradition lies not in the tradition itself, but mainly in the creative way of thinking. This creative nucleus is a necessary part for growth in a society, if it is missing a whole culture can get lost and eventually melts together with the universal culture. Therefore a balance is needed, Ricoeur was interested in the question; how to revive an old, dormant civilization and take part in universal civilization.³⁸ The old civilisation is called dormant, this implies that these old cultures have not participated in universalization and self growth since a long time, but this is not the case for every old civilization, even if the amount is not visible at first sight, influences have been transferred since the beginning of time. Today we are dealing with the same issues referred to by Ricoeur, since technological advancement is taking place, architects need to look for a way to embed this in their designs, while having innovative ideas on how this could help a design to fit in the context.

Since the notion of critical regionalism is an 'old' one, that was established over 30 years ago, Frampton questions himself on the use of this notion and the meaning it has today.

³⁷ Ibid., 47.

³⁸ Lefaivre and Tzonis, *Architecture of regionalism in the age of globalization: peaks and valleys in the flat world*.

*Thus, for me, a liberative promise for the future resides in an agonistic architecture of the periphery as opposed to the subtle nonjudgmental conformism of ruling taste emanating from the centre.*³⁹

He uses *agonistic* instead of the word *critical* that he used in his previous essays. Where *critical* is used, according to Lefaivre and Tzonis, as a way of thinking that needs to define the origin and constraints of the tools of the thinking that one uses.⁴⁰ By using the term *agonistic*, Frampton emphasizes the importance of being critical and complete in finding the best result, the word is an ancient Greek, referring to contest. Significant in the use of this word is the difference between the centre and the periphery, since people are becoming more and more conform about the western ways of doing, even non-western countries, it is necessary for people who have a position in this area to use their ability to create their own future without copying the centre. Since the influences of the centre have been present since the beginning of time, it is hard to draw the line, where do we want the universal to intervene and in what amount do we need tradition, to maintain a relation with the context?

Lefaivre and Tzonis explained the critical way of viewing for, amongst others, Brazilian architects.

*Like Aalto, Niemeyer's and his generation's regionalism did not mimic colonial and folk traditions. They recruited solutions from these precedents while keeping a critical distance, like strangers to the era.*⁴¹

As the last sentence implies, their way of thinking was seen as something innovative for the time being, resulting in them being seen as strangers. Today, this point of view is shared with a large part of architects, regionalism itself has been criticized, and it is seen as a natural process that an architect uses a critical approach in the design practice. In order to illustrate the best ways to approach architecture in the present-day, the use of the term regionalism might not be in place, since it automatically adds the history and the negative aspects that developed with it in time.

³⁹ Frampton, "Towards an Agonistic Architecture."

⁴⁰ Lefaivre and Tzonis, *Critical Regionalism: Architecture and Identity in a Globalized World*.

⁴¹ Lefaivre and Tzonis, *Architecture of regionalism in the age of globalization: peaks and valleys in the flat world*: 153.

Next to that, the use of other terms have been seen after the successful years of critical regionalism, terms that are trying to imply the importance of balancing traditional and modern are the subject of a large group of architects looking for a new approach towards architecture in the 21th century. Nevertheless, this again implies that the use of a notion is always restrictive, words have different meanings for different people and times, sometimes the complete opposite of what someone else is trying to imply.

Even though the use of the term critical regionalism is not used very frequently, the underlying thought is still applicable, finding the balance between the advancement of mankind and the locality and tradition. Today the aim lies not only in searching an identity as an answer to the universalization, but also in sustainability since the climate issues play a huge role in the 21th century. Next to that, the critical way of thinking that is required for having a critical regionalist approach is not only linked to make the building blend in with the environment, it includes a critical and active way of thinking about all involved aspects in the architectural discourse. We have seen in history that an approach that pleads for a good relation with the context and that promotes questioning and criticizing has been used for a long time. As earlier mentioned, this approach is not linked to a certain style or aesthetic appearance. This is linked to the use of words describing this approach, which does not mean that all architects who created buildings that are perfectly embedded in their context can and should be called critical regionalists. Therefore we should not be restricted to the use of one term to describe a way of doing that should be the most important one in the architectural discourse. If all these issues relating to the context will be addressed with an eye for innovation, this results in architecture that balances between universal and traditional.

A New Approach Towards Architecture in the Periphery

Since critical regionalism is a notion that developed in the West, mainly addressing an approach as an answer to the upcoming of modernist and post-modernist styles, we need to know the position of this notion in non-western countries. During and after the colonial period modern western movements have been implementing their idea of modern architecture in their ancient colonies. These non-western countries are therefore the most important areas where the balance between tradition and modernism has to be examined and achieved, since it was used as experimental areas for the West with an entirely different context than the Western themselves.

This search for tradition in times of modernity has been a point of discussion since the occurrence of colonialization, and has been examined by different writers throughout the years. Including Frampton, who discusses the importance of architecture in the 21 century in his essay "Towards an Agonistic Architecture".

One of the most surprising and gratifying aspects of the contemporary practice over the past two decades has been the way in which accomplished architects from the so-called 'first world' have found themselves building from time to time in the equally eponymous 'third world'.⁴²

The division of the world in 'first' and 'third' by Frampton is made to show the impact universalization has on the built environment, mainly in these 'third world' countries. We can discuss whether these terms of first, second and third world are still relevant nowadays, as the distinction between these three are not applicable in the time we live in. This is similar for the use of the words center and periphery, the use of these words can be observed in a way that center is seen as the source of all information and progress and the periphery is just a secondary layer that benefits from this. Nevertheless, the periphery also means that it is an area open to growth and unlike the center, they don't feed of others then themselves. To understand the approach that is needed in non-western countries, the difference between the centre and the periphery has to be clear. Historically the distinction between centre and periphery is based on the

⁴² Frampton, "Towards an Agonistic Architecture."

colonizers as the centre and the ancient colonies as the periphery.⁴³ The 'third world' can be used as a synonym for the periphery whereas the 'first world' stands for the centre, nevertheless these words were not based on the same subdivision, explained earlier. Even though Frampton notices that the centre is intervening in the periphery maybe more than it should, he says that this position in the centre can also be a way to have an approach that is more practically and poetically then coming from the periphery.⁴⁴ The position of an 'outsider' can be more fruitful in these kind of situations. This difference between the centre and the periphery has also been one of the main issues mentioned by Ricoeur. Himself being from the centre has caused his writings to be written out of a central perspective of the world.

The fact that universal civilization has for a long time originated from the European center has maintained the illusion that European culture was, in fact and by right, a universal culture.⁴⁵

This universal culture was forced upon ancient colonies of the West, resulting in architecture that tends to be 'modern' in the eyes of the West. Problematic is that this way of thinking remains, even after the colonization, orientated towards the west and it leaves the local people to admire something that is actually not really their own. Architecture after this colonialization period was strongly influenced by western architects, but this did not imply that architects from the periphery were standing still. Architects that influenced the architecture in their own countries, were among others, Charles Correa and Hassan Fathy⁴⁶, both on the search for an architecture that answers issues that the vernacular was too naive to answer, and the modern was too universal to answer.

Duanfang Lu addressed these issues in her book *Third World Modernism*, where the relationship between architecture, modernity and identity is examined. She discusses this term by putting the word modern in four perspectives. Namely, modernism as globalism, modernism as

⁴³ *In practice there is a vague line between these two and we can also speak of a semi-periphery, since this study is mainly about Morocco (positioned in the periphery but more developed than a large amount of other peripheral countries) I will not discuss this.*

⁴⁴ Frampton, "Towards an Agonistic Architecture."

⁴⁵ Ricoeur, "Universal Civilization and Natural Cultures," 48.

⁴⁶ Lu, *Introduction: Architecture, modernity and identity in the Third World.*

developmentalism, modernism as nationalism and modernism as post colonialism.⁴⁷ Each of these perspectives are linked to the third world and explain the importance of modernism in order to achieve progress in the third world. Important is that she distinguishes modernism with a positive and negative aspect, not only giving place for colonists but also improving the development and identity of a nation.

If we look at historical events, It is widely known that foreign architects are involved in building in countries they have no sufficient knowledge of. This phenomenon can be traced back to the 17th century, when architecture in England was influenced by the arrival of Italian and French architects, trying to apply their classical architecture and classical rules to the English built environment.⁴⁸ Although this was an exchange that remains between western cultures, the fact that they were designing for a context that is not their own and classical influences were implied, shows that their interest was mainly in transferring this universal style instead of adapting to the identity of the place. In the beginning of the 20th century we can see the phenomenon of centre educated architects being send to the periphery mounting up. This was the case in Morocco, where Henri Prost was chosen as head of urbanism. Lefavre and Tzonis say about his motivation;

*Prost was one of those architects, engineers, and 'urbanists' who chose colonial jobs out of professional ambition, but also in the honest hope of carrying out high-quality and innovative work that would not be possible in France.*⁴⁹

Since foreign countries have better possibilities in realising a project, Prost used this fact to improve his working skills. This happened years later in Chandigarh, where the architects and urbanists Albert Mayer and Matthew Nowicki made a master plan for the city, in this period the interest for regionalism in education improved enormously. After the dead of Nowicki Le Corbusier took this over and designed his famous master plan.⁵⁰ This phenomenon of using colonial lands as exercise field is familiar.

⁴⁷ Ibid., 3.

⁴⁸ Lefavre and Tzonis, *Architecture of regionalism in the age of globalization: peaks and valleys in the flat world*: 28.

⁴⁹ Ibid., 102.

⁵⁰ Ibid., 132.

*..the colonies were often employed as laboratories of the newest design ideas, through with the metropolis imposed political and cultural influences upon the rest of the world.*⁵¹

The period when colonialist powers were losing, western influences were placed in the periphery through the start-up of the Hilton hotels, which were in fact a piece of America in every country.⁵² The hotels were built in a 'modern' American style and functioned as a way to maintain power in the colonized countries. Nowadays this type of capitalism is still seen, luxurious tourist complexes are being built to invite the overly western tourists in all corners of the world. Resulting in a romanticized way of travelling, that in fact does not show the real country, but the one that was created to please the West.

Another way of propagating American influences on the world was creating embassies throughout the world. This was done to gain popularity while showing modern buildings in less developed countries.⁵³ This phenomenon of building embassies in foreign countries remains a contemporary one, often the question is asked by the architects, what can we do to get to know the local aspects and how can we translate these in a design while embracing the embassies' characteristics. The American way is not the only way, architects positioned in the centre who worked on the periphery are often challenged to create a design that fits perfectly in their surroundings. An example project is the Dutch embassy in Addis Ababa, Ethiopia. This was designed by Dutch architect Dick van Gameren and Bjarne Mastenbroek which based his design on the rock hewn churches of Lalibela. Lalibela is known for its earthy red toned churches which are hewn in the ground, connected by stairs and caves. His embassy uses the same concept, being one with the site. The building material is mainly concrete, painted with a earthy red tone to refer to the rock hewn churches. Although inspired by Ethiopian monuments, the interior of the building and mainly the workspaces are completely designed in a Dutch style, giving the employees the idea that they are working in their home country. Since embassies are still a piece of home in an different environment, they often show the merging of two cultures in a design.

The fact that an architect's comes from the centre, does not generally

⁵¹ Lu, *Introduction: Architecture, modernity and identity in the Third World*, 6.

⁵² Lefavre and Tzonis, *Architecture of regionalism in the age of globalization: peaks and valleys in the flat world*: 144.

⁵³ Ibid., 140.



Dutch Embassy in Addis Ababa, 2005, Ethiopia by Dick van Gameren and Bjarne Mastenbroek

The design is based on the rock hewn churches of Lalibela, the long shape is adapted to the characteristics of the site and the color refers to the color of Ethiopian soil found at the rock hewn churches. The interior is adapted to its function as a Dutch embassy and has a configuration that looks like Dutch office buildings.



Urban plan for Nemours (Ghazaouet), 1934, Algeria by Le Corbusier Nemours, a small village in the north west of Algeria, was used by Le Corbusier to design an urban plan. He noticed that the colonial architecture was not fitting in the site, therefore he based his designs on the existing *kasbahs*, while using modern materials. The design of an harbor would make it possible that trading routes are more available.

mean that their point of view is always directed towards a preference for their home country. Le Corbusier was appointed to design an urbanization plan for the town Nemours in Algeria, the current Ghazaouet, in 1934, he based this plan on a finding in which he noticed that the old *kasbahs* (enclosed towns) were better embedded in their context than the colonial settlements.⁵⁴ The only difference is that this new *kasbah* was built with modern materials, steel and cement. The housing projects were designed with good consideration of the environment, oriented to the North-African sun. Even though the plan was never realized, the plan would have been revolutionary for the city, encouraging the economy with the construction of a new harbour.

Architects were using their position in the centre to work in the periphery. As we could see, this can have a negative and a positive side. Letting a western architect work in the third world, could enable him to have a fresh look on the situation. When someone has been growing up in a culture that is familiar to the person, there is a possibility influence and national pride. As we could see in history, this caused a nation to dig its own grave. An 'outsider' can therefore have an innovative position, using their experiences and innovations of their own culture to help improve the other. On the contrary, the negative side of this work style is the lack of knowledge about the context and tradition. Growing up in a surrounding that will also be your workplace has a great advantage, providing that a critical position is adopted.

Indian architects have showed this in their work, for example Charles Correa and Balkrishna Doshi, who use their knowledge on the complexities of the Indian life to look for solutions in architecture.⁵⁵ Doshi shows this knowledge of his own context and tradition in the design of his own studio called Sangath, just outside Ahmadabad built in 1981. The configuration of the project is based on a village, the exterior space consists of different meeting places, waterfalls and steps, referring to the public spaces in Indian cities. Hindu values can be seen back in the way he created labyrinth spaces and shaded areas. The design is embedded in the nature, the spaces are referring to the landscape, like the presence of caves and water, and melt together with the surroundings. This personal project illustrates his knowledge of local aspects and illustrates how he incorporated this in the translation to a building. This however, is not a good representation of how he views the future of architecture in his country of origin since it is a personal project, his viewpoint on the future

of Indian housing is much better illustrated in his Aranya housing project, in which he developed a system to improve the conditions of slum areas. He provides basic elements like the foundation, water and electricity which leave freedom for the dweller for their own interpretation on how the different spaces in a dwelling should be configured. This illustrates that while Doshi understands and respects the way of living that goes with the culture, he still has certain aspects open to fill in by the dwellers themselves. Nevertheless, this does not mean that he has no control over what the area will look like after people filled this in themselves. By giving a certain amount of fixed aspects he, as an architect, still regulates the way people can build. This slum upgrading project also seizes the well known division of classes in India, by mixing different dwelling sizes with incrementality and improving the quality of public spaces, he is making sure that they interact with each other.

⁵⁴ Ibid., 150.

⁵⁵ William J.R. Curtis, "Towards an Authentic Regionalism," *Mimar* 1986, 29.



Sangath House Ahmadabad, 1981, India by Balkrishna Doshi The configuration of the project is based on a village, the exterior space consist of different meeting places, waterfalls and steps, referring to the public spaces in Indian cities. Hindu values can be seen back in the way he created labyrinth spaces and shaded areas. The design is embedded in the nature, the spaces are referring to the landscape, like the presence of caves and water, and melt together with the surroundings.



Aranya Community Housing Indore, 1989, India by Balkrishna Doshi This housing project can be seen as a slum upgrading project. The public space is based on traditional Indian aspects as an 'otta' which is an outdoor platform for families to come together and improves the public street life compared to the slums. Because the architect has great knowledge of local culture he decided to give people their own input on how they want to live and on how this translates to the configuration of the floor plans. He does this by only providing them the foundations and basic needs of the dwelling, thereafter the dwellings can be adapted through time by the dwellers themselves. The picture above shows the current state and below the initial stage of the project.

Another architect that can be named as a critical regionalist architect is the Portuguese architect Alvaro Siza. Siza is known for his profound knowledge about creating a relation with the context.⁵⁶ His projects are based on the creation of the best possible relation with the site, since his works are often aesthetically abstracted, the link with local tradition is hard to find, but still present.⁵⁷ This illustrates that a relation with the context cannot always be clear on first sight, the underlying thought is what makes the change. It can be argued that architects that are emerging from the periphery are naturally searching for a way to oppose the universal, since this is emerging from the centre.⁵⁸ This way of thinking can be found back in his project in the Malagueira neighbourhood in the Portuguese city Évora. After the democratic revolution in Portugal, the outskirts of towns became full of unplanned houses⁵⁹, this in combination with a lack of organisation created doomed scenarios which had to be solved in a practical way. The project illustrated how Siza sees the balance between modernity and tradition. Comparable as in Doshi's Aranya community Housing project, Siza finds this balance in organizing architecture while keeping in mind that a part of this traditional ways of doing is enabling people to use their individuality and their personal input in the project. The master plan was adapted to the site in such a way that it respects the region it is designed for and still caters for a new way of thinking, he took his inspiration from the existing landmarks in and around Évora and the characteristics of the site such as topography. Since the project was an alternative for the upcoming of spontaneous settlements on the outskirts of towns, Siza used this 'problem' as a way to solve issues, not only was he inspired by the vernacular but in this case mainly by the modern vernacular, the spontaneous settlements. He therefore chose to keep these spontaneous settlements and to make them a part of the incremental project itself. Siza was not only capable of balancing modernity

and tradition, but also of using the problem itself as an inspiration for a new way of adapting the existing to the new. This illustrates his thought about the role of the architect, which is only fulfilled when there are no traces of an architect's intervention and people feel one with their

The work done in his own environment is not the only place we can see his interest for a more social and critical way of approaching architecture, this also can be found in a housing project for The Hague in the Netherlands. This project was delivered at the end of the 80's and consist of 106 dwellings for the social housing sector. Even though the location is to be considered in the centre, the project is located in an area in The Hague that has the highest amount of non-autochthonous inhabitants, which focussed on providing housing for the 'lowest' incomes of the city. Whether an architect positioned in the periphery is able to make drastic changes in the centre is not only up to the skills of the architects themselves, but also depends on the acceptance of the people positioned in the centre.

⁵⁶ Nelson Mota, "Between Populism and Dogma: Alvaro Siza's Third Way," *Footprint Defying the Avant-Garde Logic: Architecture, Populism, and Mass Culture*, no. Spring 2011 (2011).

⁵⁷ Juhani Pallasmaa, "Tradition and Modernity: The Feasibility of Regional Architecture in Post-Modern Society," in *Architectural Regionalism: Collected writings on Place, Identity, Modernity and Tradition*, ed. Vincent Canizaro (New York: Princeton Architectural Press, 1988).

⁵⁸ Nelson Mota, "The Ambiguities of Critical Regionalism," in *Critical Regionalism Symposium* (Delft Delft University of Technology, 2014).

⁵⁹ Nelson Mota, "An Archeology of the Ordinary: Rethinking the Architecture of Dwelling from CIAM to Siza" (Delft University of Technology, 2014).

These architects who have seized the importance of a new approach towards architecture which is embracing traditional aspects as a part of progress, have in common that they criticize architecture that was not designed for a certain time and place. This phenomenon however is not only restricted to non-western countries. In history we have seen that critical regionalism came about in the West, if we look at the Dutch example of John Habraken, we can see that traditional aspects have played a huge role in the way he approached architecture. This is especially found in his project 'supports' in which he is looking for a way to give people the freedom of design back that they used to have while still providing the same density necessary as in the pre-war housing blocks. The importance of leaving freedom and flexibility in a design is, according to Habraken, a traditional aspect of Dutch architecture. He says:

*To keep the water out by maintaining the polders and dikes people had to act together and the cities grew in history as symbols of the creative tension between free individuals brought together by necessity into strong social and physical organizations.*⁶⁰

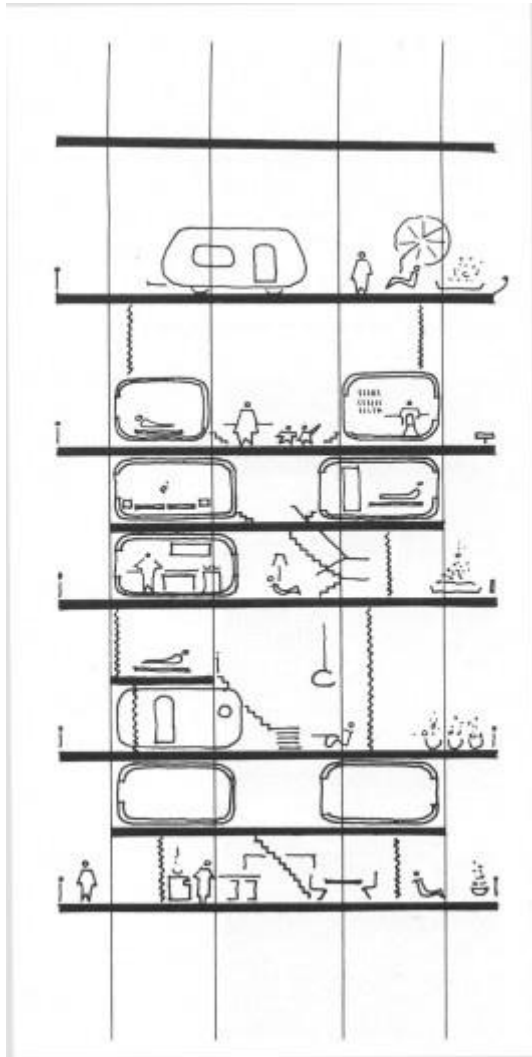
To provide an alternative for these impersonal building blocks, he introduced a support system which allows adaptable dwellings. This should create a balance between creativity and fixed elements. The only element that is fixed is the construction of the building, there is no predetermined plan. To illustrate how these supports work in real life, he created a series of variations which show possible representative floor plans. Although it is usually said that these large building blocks are typically Western, this case illustrates that even when they are designed in Western context they still lack the relation with the site and tradition, in this case, a tradition that firstly promotes creativity and place for individuality. Therefore we could argue that architecture that is lacking this understanding of tradition is actually not fitting in any culture and even when these large scale building are implemented in Non-Western contexts, this does not imply that they do fit in the Western contexts, as shown by John Habraken. SAR (Foundation for Architects research) was using this idea of supports in combination with the expectation of the users, which resulted in certain variations of dwellings. This study of variations was done to look up what effect the decisions of the architects have on the way the dwellers configure their own

⁶⁰ N.J. Habraken et al., *Variations: The Systematic Design of Supports* (Cambridge: Laboratory of Architecture and Planning MIT, 1976). 8.

floor plans. When leaving the design open for free interpretations, the architect has the biggest responsibility possible, unlike mainstream thinking. The last two references have showed us that this progress is not always something that should be filled in by the architects themselves, but remains flexible for changes in the future and is therefore shaped in projects that are incremental and encourage individuality, the position of the architect however stays crucial, since the first phases of designing direct people towards certain design possibilities

Another Dutch architect that criticized the extremes of Modernism was Aldo van Eyck. His connection with the CIAM in 1974 has enabled him to speak up about the impersonal functionalism movements that were mounting up during that time. He fought for an architecture that was more authentic and closer to the people. He did this not only by studying his own culture, but also by studying several non-western cultures, which helped him to develop a critical view towards the evolutions in architecture during that period of time.⁶¹ We could argue that this interest of different cultures came from his background, van Eyck was brought up in England with Dutch parents, his grandparents were inhabitants of Suriname. He never really resided in a place that was 'his own' by heart. Even though he came back to the Netherlands after his study period in Zurich, it has always been a place distanced from him. This might have permitted him to adapt this critical approach towards the modern architecture and his interest in the vernacular of non-western backgrounds. After the second world war, Aldo worked for the municipality of Amsterdam, during this period he designed playgrounds on abandoned areas. These playgrounds were mostly designed for places where Jewish families would live before the war. Even though this is an extremely tragic happening, Aldo was able to find the joy in the sadness. By creating these playgrounds the life after the war would bloom by giving the innocence of the children place in the daily life. By using minimalistic and local attributes, he played with the imagination of the kids to create their own interpretation on how they want to use spaces. This flexibility is also found on a larger scale, the playgrounds adapt though time and disappear when the lots are used to construct new buildings, on the small scale the flexibility lies in balancing the role of the designer with leaving open ideas for the children to interpret their own playground and how their use the spaces.

⁶¹ Francis Strauven, *Aldo van Eyck: Relativiteit en Verbeelding* (Amsterdam: Meulenhoff, 1994).



Supports, 1976, by John Habraken Habraken emphasized the necessity of leaving space for creativity and own interpretation in architecture, based on traditional Dutch ways of doing where individuals search for organization together. This drawing shows how the construction, the supports, of a building can be the basic elements for the design. The infill shows variations of this system that could be created while staying within the same support system.



Playgrounds Amsterdam, 1947-55, by Aldo van Eyck After the second world war the need of public playgrounds for children became higher because of the post-war baby boom and the increased use of cars. Van Eyck notice this and started with the design of several playgrounds in Amsterdam, consisting out of minimalistic attributes . Since these playgrounds are usually not permanent and children make up their own way of playing (tools of imagination in Aldo's words) with these elements, flexibility plays a high role in his designs.

The Contribution of Critical Regionalism to a Better Relation with the Context

Today, the mutual influences that Western and Non-Western world have had on each other created architecture that is searching for the best of both worlds. We could see that the search for a balanced architecture starts with acknowledging the problems we have known and the one's we know today, this walks hand in hand with a knowledge of local culture and tradition, which should provide starting point for a design that respects tradition and is focussed on progress in the mean time. We have seen that this problem of a weak relation with the context resulted in a group of architects criticizing this and answering with projects that are going back to the roots of local tradition. This does not mean that they are neglecting progress, as we have seen happening in Regionalist movements, but instead they are balancing these two in a way that it stays open for changes in the future.

In the first subchapter we examined the road towards critical regionalism, we noticed that the term developed as a reaction to a rather universal style, unlike regionalism, critical regionalism is not based on opposing the modern, but rather on finding a way that balances between the two and always take into consideration the circumstances of the place and time we live in. In the second subchapter the use of this term is examined in the present context, we could argue that the use of the term critical regionalism might be outdated whereas the underlying thought is still applicable, finding the balance between the advancement of mankind and the locality and tradition. Today we don't need to be restrictive by using only one word, but rather a way of thinking that should be shared throughout the world. Because of western hegemony in ex-colonies, these areas are the most vulnerable for losing the balance between universal and tradition. On the other hand, there is still a rich culture and the task is to maintain and protect it instead of losing it to the universal. Architects who are working with a context that is not their own tend to have an eye for things that are less likely to be considered important by architects that work in a familiar context. Nevertheless, there is a gap considering the knowledge of local ways of doing. Most projects that are adapted to the way people use spaces are looking for the balance between the input of the architect and the freedom of the users. Knowledge of a place does not mean that the architect is the only actor in the process of designing, the references have showed us that real knowledge of the place eventually lead to flexibility and only leaving the

necessary to design for the architect, were the remaining is adapting to the needs and wishes of the people actually using the space.

Architects working in non-western countries have pleaded for an approach to embed local culture in their works, regardless if they are natives or not. On the other side we have seen that this was established on a superficial way, as a cause of lacking research done on forehand. In the suture we have to work towards an architecture that encourages the users to have a critical position towards the universalization and their own tradition. If this goal is reached, it will enable regions to build towards their own development without being dependent on the global pressure of becoming modern and consequently losing tradition, this autarky is necessary to establish a world in which there is place for individuality while supporting the advancement of mankind.

Case study: Morocco

Holding on to Identity during the French Protectorate

The position of Morocco in the quest for a balanced architecture between modernism and tradition has played a role since the beginning of the establishment of the French Protectorate in Morocco in 1912. This was the start of the first modernist movement in Morocco mainly directed by the French. The second modernist movement in Morocco took place after the end of the protectorate in 1956, still influenced by the French. This however was not the start of external influences in Morocco, the period before French intervention was characterized as a mixture of different cultures and tribes, it has been a settle place for the Berbers, Carthagians, Romans and the Arabs.⁶² Mainly because of the country its strategic position as the door to Africa, has made it an interesting area for these different tribes and cultures. The position of Morocco can be seen on different levels, in this research most importantly as a country in the periphery that has been used as an 'exercise' field by the centre, but has also seen an interesting development which was encouraged by the centre.

The first wave of modernism was strongly linked to the pre-war nationalist thoughts, were we could see that aspects like the vernacular were studied but remained superficial. The second wave of Modernism in Morocco was mainly led by GAMMA (Groupe d'Architects Modernes Marocains), also active before the independence and can be seen as less nationalist and attempted to merge with the context and improve the conditions of the neglected native Moroccans, who have not been a common concern in most colonial regimes.⁶³ After the second world war, the CIAM came about in most French colonies, in Morocco this was established by Michel Écochard in 1951. This group CIAM Morocco, was later converted into GAMMA, it consisted of

⁶² Nhamdi Elleh, "The Architecture of the Kingdom of Morocco," in *African Architecture: Evolution and Transformation*, ed. Nhamdi Elleh (McGraw-Hill, 1997), 91.

⁶³ Tom Avermaete and Maristella Casciato, *Casablanca Chandigarh: a report on modernization* (Zürich: Canadian Centre for Architecture and Park Books, 2014). 35.

different French and Moroccan architects who addressed aspects as context, climate and human habits in their works.⁶⁴ Their works mainly consisted of urban plans, to answer the housing problems under the lower classes of the society based on grids. An example is the town Youssoufia, where a project was designed based on a grid structure with dwellings of one-storey that were designed after a thorough research of the vernacular Moroccan housing. The creation of new towns after and during the French protectorate in Morocco was a common phenomenon.

Écochard used his position in the centre to attract Moroccan architects to work with CIAM, this made it possible that CIAM and later GAMMA implemented their vision of modern architecture in Morocco. Today, this search for an architectural style in Morocco is still relevant, whereas the focus used to be on improving modernity and creating new housing projects, it is now a search for balancing between modernity and tradition. If we take CIAM and GAMMA as an example, their ability to make a change has been enforced by attracting as much architects and urban planners as possible. Nevertheless, the reason why the need for new towns and housing was rapidly growing during and after the colonial period, is the result of the changing economical and political state of the country caused by the French colonialists. People were forced to move to urban settings to make a living, resulting in rapid growth of towns. The architect Aziza Chaouni distinguishes two work methodologies that were used by Ecochard to make sure his designs were rooted in the Moroccan culture.

*The first was the knowledge of the social and physical characteristics of the local context, which should rely on sociological and building surveys as well as on cartographic and statistical analysis in order to shed light on the population dwelling habits. The second was his consideration of history and evolution.*⁶⁵

Écochard based his work mainly on the Moroccan context, even though he has no experience with the local culture and ways of doing, he used different work methods to still achieve this. From a modernist viewpoint he values the importance of evolution, of architecture that grows with the context. These aspects resulted in a system developed by Écochard, housing units with facilities placed on a 8 by 8 meters grid and adapted to the traditional urban setting,

⁶⁴ Aziza Chaouni, ed. *Depoliticizing Group Gamma: contesting modernism in Morocco*, Third World Modernism: Architecture, Development and Identity (Routledge, 2011), 57.

⁶⁵ Ibid., 62.

creating privacy and an open space for each dwelling. Even though he said to be inspired by the Moroccan context, the fact that he was positioned in Morocco remains based on political reasons, since urban planning in (old) colonies can be seen as an invention by Euro-Americans to maintain their governing position.⁶⁶

The works of French colonial and post-colonial architects are especially found in the larger cities as Rabat, Agadir, Casablanca and Marrakech. The major changes in these towns during the colonial period have had a great impact on Morocco. Nhamdi Elleh mentions the following:

*Colonial decisions are usually in the colonizers' interests, no matter how disguised or whatever motive they may have.*⁶⁷

This phenomenon is visible in the way that central-positioned architects use the colonies as an experimental playground, disguised for the local people in terms of improve the living conditions of the lower class, while the main goal was increasing popularity and the ability to experiment in other surroundings. An example of this phenomenon is Rabat, under the provision of general Lyautey the city was made the capital of Morocco after Fes in 1912. What is obvious, is that the choice was made to conserve the old town (*medina*) but in the same time preventing it to grow in the future. New towns were designed with modernist views, on the outskirts of the city mainly for the French residing in Morocco, what prevented local inhabitants to benefit on the same level as the French.⁶⁸ Henri Prost was assigned to put these plans in practice with respect to the old *medina*, which was not changed during these interventions. Since the new towns were mainly created for the French, native people that came from rural areas ended up in the outskirts of the city in subordinated villages. Nevertheless, these new plans made it possible that the economy and infrastructure of the area drastically improved.

The example of Casablanca as city that provided place for CIAM and GAMMA their projects was earlier mentioned. This city marked the beginning of the French invasion in Morocco by an event that took place in 1907, where the

⁶⁶ Marion von Osten, "Architecture Without Architects - Another Anarchist Approach," *e-flux journal*(2009).

⁶⁷ Elleh, "The Architecture of the Kingdom of Morocco."

⁶⁸ Janet L. Abu-Lughod, *Rabat: Urban Apartheid in Morocco* (Princeton University Press, 2014).

French took guard by saying they would protect their citizens.⁶⁹ This was again an influence of Lyautey who tried to implement his modern French ideas into Morocco. Today, these ideas are reflected in the 'modern' architecture in Casablanca, mainly consisting of high rise to show the importance of this economic hub for Africa. Therefore in 2018 the highest skyscraper of Africa is planned to be completed in Casablanca, using the position of Morocco as an moderator between Europe and Africa as the main reason why this city should house this skyscraper. This phenomenon of using architecture to promote a certain economical or political status can be traced back to Frampton his ideas about the *Bilbao-effect*, improving a certain viewpoint by means of aesthetic aspects. Even though we are over 60 years away from these colonial powers, the western ideal of architecture is still implemented in ancient-colonies, perhaps not as visible as before but still in large scales. Casablanca is still known for its high contrast between the luxurious shopping malls and *bidonvilles* in the outskirts, the results of years of differentiation that started with the invasion of the French.

Among the architect that worked on the built environment in Casablanca during and shortly after the protectorate, there were few native Moroccan architects involved, adding up that the French attitude towards Muslim Moroccan indigenous people was less positive then other Moroccans. This privilege of designing in places that are not your own has resulted in an architecture that has a lack of knowledge of local culture. As a result of these major interventions by mainly French architects, the latter generations remain influenced by the modernist ways of doing and are becoming an inspiration for the Moroccan architects themselves. On the other hand, we see that this resulted in architects turning away from everything that goes with modernism and creating regionalist approaches. Not only were these influences visible in Morocco, where it went to the extent that Casablanca was marked by the French as a French city⁷⁰, in France and other western countries Casablanca was romanticised, seen as a place that is exotic and mysterious and even used as a title for a movie. Together with the creation of hotels and big villa's for the French, this hedonist ways of living were encouraged by owning a Protectorate, neglecting the real life problems in Morocco caused by modernist influences. However, the line between the French and the indigenous Moroccan population

⁶⁹ Elleh, "The Architecture of the Kingdom of Morocco," 100.

⁷⁰ Jean-Louis Cohen and Monique Eleb, *Casablanca: Colonial Myths and Architectural Ventures* (New York: The Monacelli Press, 2002). 12.

is not as fixed as we think, in this discourse we can't really address this strong division since there were also French middle class citizens and Jewish Moroccans living in the protectorate, who might have been in the middle of this discourse.

After the independence in 1956 of the French and the Spanish⁷¹ colonizers, the old colonial regime was transformed in an indigenously based nation-state.⁷² However, this does not mean that the French completely detached themselves from involvement with the Moroccans. In the shape of funds and development aid, the French kept their hold on the old protectorate and promised to improve the conditions of indigenous Moroccans who were the foremost victims of the French intervention. This post-war period did not only change the daily life in the former colonies, it also marked an era where the colonizers started to feel the need to create more development-aid and to implement their more modern society in the former colonies. The Americans for example have intervened in former colonies by means of development aid and urban planning, mainly as a strategic way to increase their power during the cold war.⁷³ Even though this Western modernism might have been the highest level of modernism achieved, this does not mean that this should be set a goal for the ancient colonies. Today, this is still a problematic in most less-developed countries, globalization is taking place due to the advancement of technology and makes it possible that the whole world is connected. Since the West has most control over the distribution of these technologies, the former colonies are more and more reliable on this, not supporting the fact that the development of a nation never should neglect their tradition. After the colonization, the effects were not only visible on social levels, but also in the economy of the country, export markets changed and economical status degraded. This was another reason why complete independence was never achieved, since trade with the West, had to be prominent to maintain a certain balance in the country. The influences of the French invasion are noticeable in the most divergent parts of society, from urbanism to details in architecture. After this rich history of

⁷¹ Spain has colonized parts of Morocco alongside the French, they mainly occupied the Sahara and they marked a large part in the North their protectorate, the Rif area, which also caused the Rif war in 1921, where Berber tribes under supervision of Abdelkarim Al-Khattabi revolted against the Spanish colonizers.

⁷² Avermaete and Casciato, *Casablanca Chandigarh: a report on modernization*: 32.

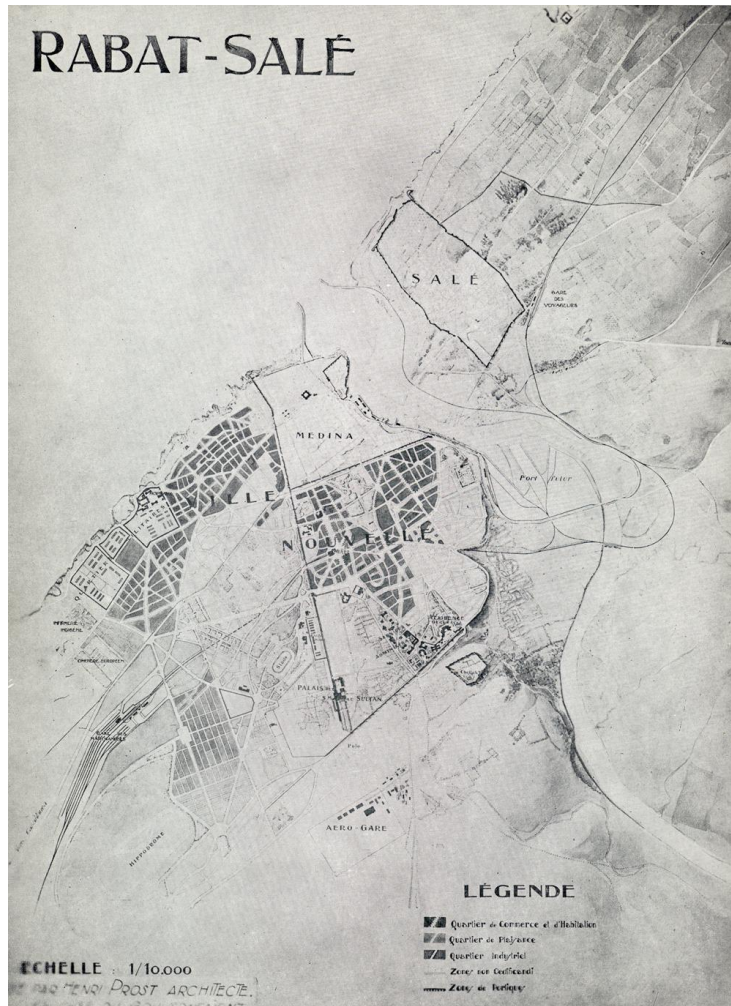
⁷³ *Ibid.*, 54.

colonial influences, now, in the 21st century Morocco has fought for their independence which is not only visible on political level but also in the fields of architecture and urbanism. These foreign influences are still holding ground in most present-day Moroccan architecture, the colonial influences have played a huge role in the way the built environment has been shaped the last decades. During and after this period native Moroccan architects have been coping with the issue that traditional aspects were neglected or dealt with on a superficial way, the fruits of this search for identity is visible in the works of different contemporary architects. Next to this search for identity in universalism, Moroccan architecture is mostly determined by its indigenous past, the Arab presence and the colonial influences.⁷⁴ This is mainly the case for Mosques and governmental buildings where we see the strong references to this past mostly in ornaments, but modern housing projects remain strongly influenced by the colonial period and western views on modernism, since modernist projects were not always embracing the existing context and urban fabric. This way of thinking finds ground in the colonial period when Europeans were privileged to reside in modern housing projects, whereas the local people resided in less modern and less developed dwellings.⁷⁵ European dwellings were located in medium to high-rise buildings, with a richness of facilities, contradicting to the introverted Moroccan houses with minimum facilities. Since this way of thinking remains present in a large part of the Moroccan citizens' mind, a road towards appreciation for own identity and stimulation of self-growth without reliance on the centre has to be encouraged.

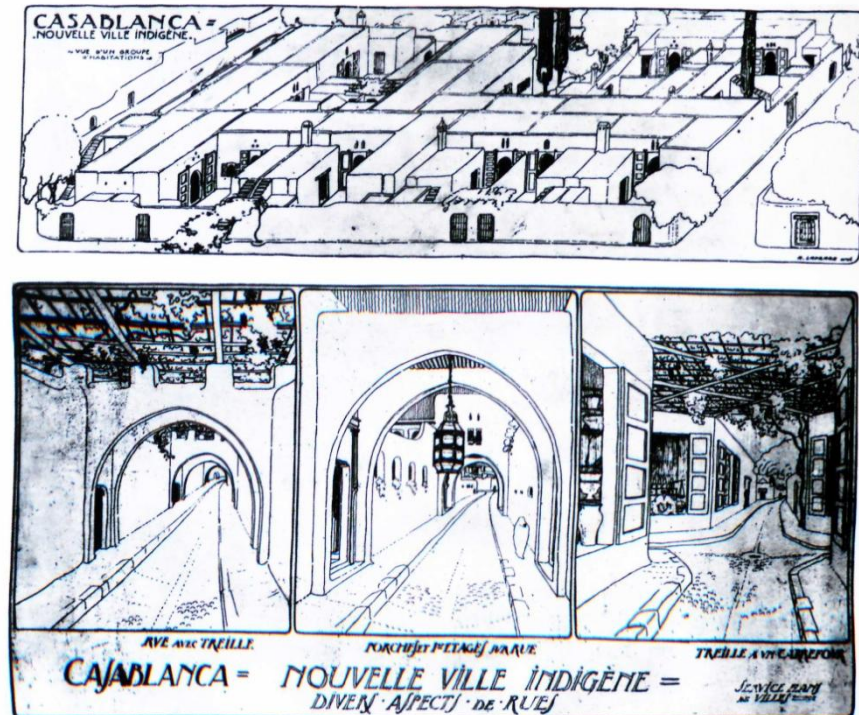
French GAMMA members were inspired by vernacular Moroccan architecture as we could see, mainly the kasbahs in the south of the country, this was also used as a source of inspiration for Moroccan architects. In the last years of the colonial period, GAMMA was not only inspired by the indigenous ways of building but also by the 'modern' vernacular, the bidonvilles which are known as the informal settlements created by the rural immigrants on the outskirts of Casablanca. Knowledge of the context was not only discovered by looking at social aspects of the vernacular, but the focus on climate became more and more practiced. Moroccan born architects Zevaco and Azagury tried to adapt their buildings to the climate conditions of the site by introducing the

⁷⁴ Elleh, "The Architecture of the Kingdom of Morocco."

⁷⁵ Chaoui, *Depoliticizing Group Gamma: contesting modernism in Morocco*, 64.



Urban plan for Rabat-Salé, 1912, Henri Prost The modern plan consisted of different new-towns on the outskirts of the city that provided place for the incoming French immigrants. The old *medina* stayed untouched, but the flexibility for the *medina* to grow in the future was neglected by defining strong borders in the urban plan, leaving no place for changes and growth in the existing urban fabric of the inner city.



Indigenous city Casablanca, 1917, Albert Laprade French architects were not only designing for themselves, but were mainly known for their visions about modernism in the lives of indigenous Moroccan people. Laprade studied the traditional *medina* and based his design on this study. Unlike most of his colleagues, Laprade valued the use of ornament and tried to use this to create a bond with the people. Even though this design was based on a study on the existing *medinas*, industrial and modernist thinking influenced the project.

brise-soleil.⁷⁶ One of the projects that illustrate this interest for architecture that adapts to the region on environmental and socio-cultural levels is Zevaco his housing project in Agadir, which provided 3 to 4 room dwellings for the Muslim middle class inhabitants. Elements as light and orientation were important to create an agreeable climate in the dwellings. The use of patios with sufficient privacy answers the need of the locals. Since the city was effected by an earthquake in 1960, the buildings have been designed in such a way that when an earthquake occurs, the damage remains minimum. The relation between tradition and climate in this project is almost unnoticeable, elements like trees that create shadow and in the mean time function as a way to create privacy, are subtle ways of Zevaco to merge the project in its context. Another architect and urbanist that designed housing for the indigenous Moroccans was Michel Écochard, he tried to dive in local culture by means of survey's, not only to examine the existing built environment but also the way the people appropriated dwellings over time.⁷⁷ This enabled him to understand how the anti-colonial sentiment developed during time and how traditional ways of growth took place by private interventions.

This period after the independence encouraged Moroccan architects to speak up about their ideas of modern architecture in Morocco. One of those architects is Mourad Ben Embarek, who started with publishing the magazine A+U (Architecture + Urbanisme). He was also an influential person during the reconstruction of Agadir after the earthquake in 1960. This period was marked by the GAMMA members as a period in which the analysis of vernacular architecture has become fruitful, before the independence we saw that architects were inspired by vernacular architecture, but their French nationalist viewpoints held them back from implementing all the outcomes of these analysis in their works. In this regard the 8x8 grid by Écochard was an exception, since he prevented the political background to root itself in the architectural discourse.⁷⁸ By only providing the necessary, the 8x8 grid furnished for the changes that occurred among the inhabitants of the new urban plan. Unlike other project during colonization, the 8x8 grid was based on a fixed urban plan and incremental dwellings, at first this was not opted for by Écochard, the first stage consisted out of 2,8 meter high patio dwellings, of

which the patio provided natural sunlight and ventilation in the building. The grid can be configured in such a way that it creates open spaces of different sizes, to correspond with the site.⁷⁹ The simple construction is not only cost efficient but also provides several possibilities to fill in the floor plans. After years, the dwellers had the possibility to adapt this patio dwelling into a multiple storey dwelling, as a result of changing social and economical status.⁸⁰ The adaption took place in different ways, to meet the needs of the local inhabitants, for example in shape of rentable lots that provided housing for low-income citizens by means of self-built dwellings financed by a micro-credit loan.⁸¹ This openness for change is part of Écochard his viewpoint on the role of the transnational urban planner, where it is not necessary to use their planning position to impose certain ideas, but keep place for individual choice and growth in the future. In the 8x8 grid, this can be seen as the fixed urban plan and the changeable architecture on this urban plan. Even though the role of the architect might be less noticeable on site, the backbone of the project should be fixed in such a way that it provides clear direction and is open to changing circumstances. This might even make the role of the architect harder, since he has to be able to create future scenarios for the project without knowledge of the coming events.

This colonial period has been the starting point of drastic changes in the built environment, living conditions were improving and the first step was set towards further development of the country. Écochard his survey was not only a huge contribution to this, he did something that was unusual during the French protectorate, he brought different actors together, not only on professional fields, but also by translating the ways of living of the indigenous people and documenting problematic issues. For years the rural areas have been neglected as an area that needs development by the French regime, as a way to keep control over the people, this eventually resulted in the creation of *bidonvilles* by the rural immigrants. Acknowledging this group provided an eye-opener towards an approach that was less focussed on political benefits and more on humanitarian actions.

⁷⁶ Ibid., 67.

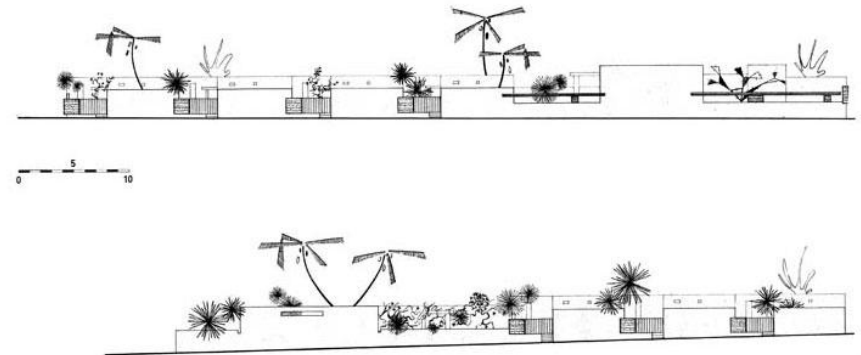
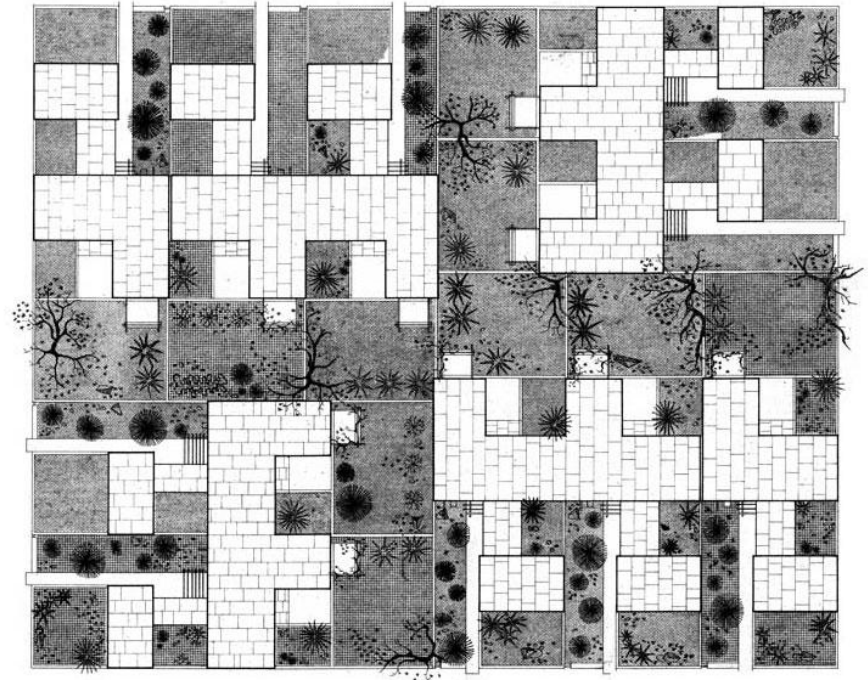
⁷⁷ Tom Avermaete, "Framing the Afropolis: The African City for the Greatest Numbers," *OASE Journal for Architecture*, no. 82 (2010): 79.

⁷⁸ Ibid., 83.

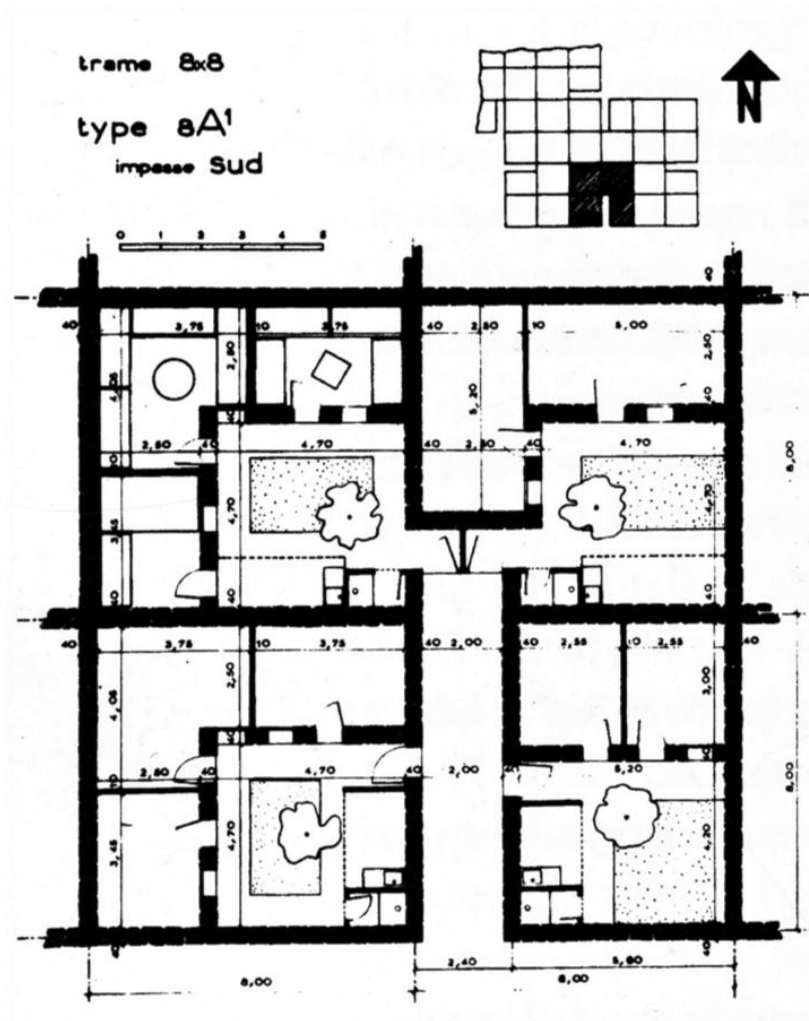
⁷⁹ Avermaete and Casciato, *Casablanca Chandigarh: a report on modernization*: 149.

⁸⁰ Avermaete, "Framing the Afropolis: The African City for the Greatest Numbers," 91.

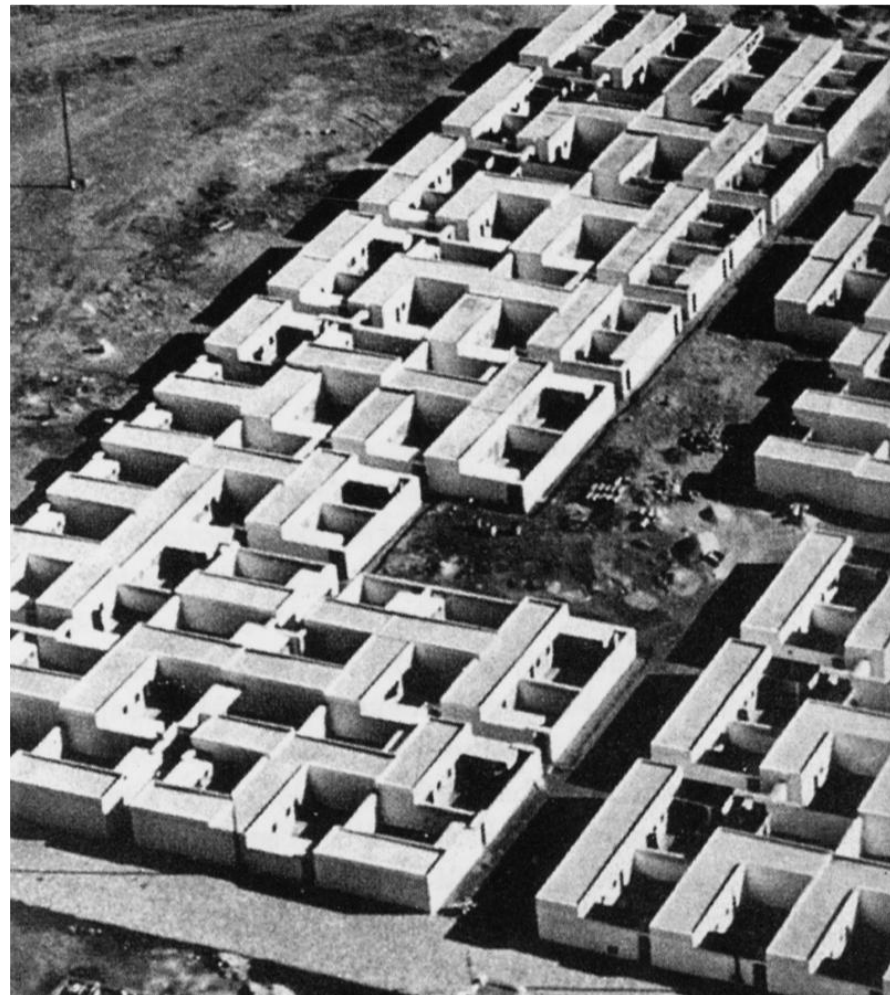
⁸¹ Chaoui, *Depoliticizing Group Gamma: contesting modernism in Morocco*, 74.



Courtyard houses in Agadir, 1964, Jean-Francois Zevaco After a disastrous earthquake in 1960 struck the city Agadir, the need of housing rose up. Zevaco created these affordable dwellings for the middle class Muslim citizens of the town, based on an introvert floor plan with patio's, open en closed. There are two types of dwellings, both only consisting out of one storey but configured in a different way. The richness of this project lies not only in the adaption to social and cultural aspects, but also in the design with the local climate. The use of shutters prevents the sun from warming up the building and cross-ventilation provides an agreeable inner climate. The importance of light in his project can be seen in the way Zevaco uses color and vegetation to obtain the right amount of light in the project.



8x8 Grid in Casablanca, 1940-1950 , Michel Écochard The 8x8 grid is the start of incremental housing in the post-colonial period in Morocco. Écochard provide the necessary by designing a grid that can be used in different ways regarding the context. Initially he planned that on this grid one patio dwelling would be build with a height of 2,8m and a patio to provide natural sunlight and ventilation, later the local people appropriated the area in such a way that there was no patio anymore and the height has reached four storey's. The backbone of the 8x8 grid however stays visible, even when the inhabitants have changed the building types.



The Position of Morocco in the 21th Century Architectural Discourse

Today, Moroccan architects are still looking for a new approach towards architecture in Morocco which embraces tradition and local ways of doing. Tarik Oualalou and his wife Linna Choi, partners at KILO Architectures, have had the opportunity to design different projects, in the periphery and the centre, their offices are in Paris and Casablanca. Their projects have played a considerable role in transferring Moroccan architecture to the outside world, mainly European countries. For the Venice biennale in 2014 they were assigned to design the Moroccan pavilion, this same year they represented the exhibition *Le Maroc Contemporain* at the IMA (*Institut du Monde Arabe*) in Paris, by designing a temporary tent installation in front of Jean Nouvel his building for the IMA. Inside this traditional sheepskin tent is place provided for a Moroccan café, restaurant and several stands that illustrate traditional Moroccan arts and crafts. This phenomenon of using foreign aspects to attract the public was also used long before the independence, when African tribes were being shipped to Europe to entertain the population. Today, however, this is being done to promote mutual understanding, by opening up a traditional Moroccan aspect to the west, people are becoming more familiar with it and tend to appreciate it more, since it is no longer an unknown area. Oualalou has given his own interpretation to contemporary housing in the project Co-Habitation in Marrakech, which was completed in 2011. He build 5 experimental houses which were completely private despite the fact they are build in a vertical line. The project is a prototype that can be adjusted depending on wishes of the family, providing more or less private and public space. Since the matter of privacy plays a huge role in Moroccan architecture, Oualalou has used his own interpretation of this and adapted it to the wishes of a modern family. The project is a good example of an experiment that helps develop the road towards housing projects that actually fit in the context, even though the target group are in this case mostly higher incomes.

The current quest for architecture that answers the need for tradition is filled in differently by contemporary Moroccan architects. One of these architects is Taoufik El Oufir, who was asked what the importance of Moroccan tradition is in his work. He starts with addressing the necessity of referring back to Moroccan tradition in contemporary architecture. Doing this in his work mainly by referring to Moroccan crafts when designing aesthetic aspects,

resulting in traditional Moroccan shapes on the facade, creativity is according to him necessary. Apart from this, he speaks about the necessity of Moroccan architecture to become more durable, sustainable and to answer the climatic problems that occur today.⁸² Instead of using these superficial elements to imply the importance of Moroccan tradition in architecture, the importance of sustainability is not only valuable in terms of improving the inner climate and the durability of a project, but also to create a bond with the context, which consist of the Moroccan climate. His opinion on the present-day housing created in Morocco is that it lacks place for cultural activities. Faycal Sentissi shares the point of view that architecture has to be sustainable, but being the designer of different automobile showrooms, he thinks technology can help us grow in architecture.⁸³

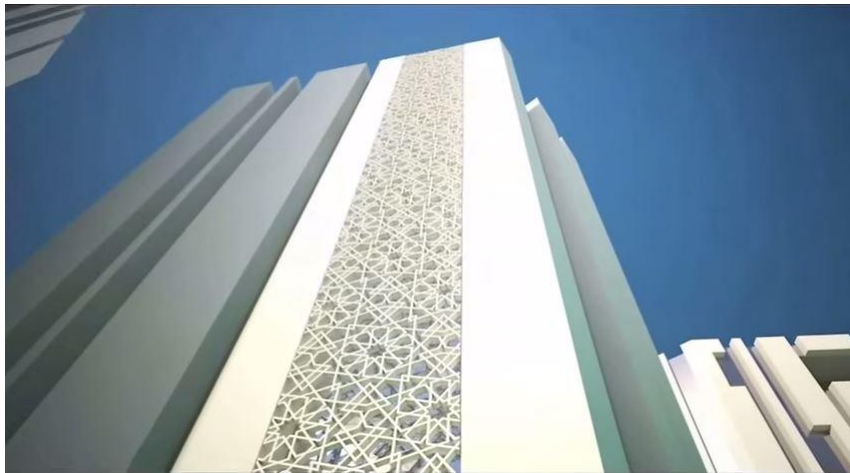
During the exposition in the IMA *Le Maroc Contemporain*, a corner was dedicated to illustrate the current status of Moroccan architecture, the exposition on architecture was divided in 5 categories. The roof, materials, the city, the patrimony and the motif. The search for a relation between high-tech and low-tech has been addressed by the architects Nieto Sobejano and Omar Alaoui in the design of the *musée d'art contemporain africain Al-Maaden* in Marrakech, which will open its doors in 2017. This project was part of the category material and illustrates an innovative way of using modern technologies while taking advantage of the traditional materials of the site. The extensive use of concrete after it was introduced in Morocco was for them the reason to create a project that does not belong to the modern concrete building method and the ancient building materials. The category motif was mainly about the use of the arabesque inspired motives on the facades, also known as the *zellige* (Moroccan tiles) motif. El Oufir was one of the architects representing this category. The combination of this traditional aspect with modern architectural elements like the double facade were the topic of attention. The attention for this aspect in the exposition shows that it is a relevant aspect in 21th century Moroccan architecture. Nevertheless, this use of obvious cultural elements are mainly aesthetic and have no value to the true relation with the context, leaving it to be problematic since this architecture looks modern and Moroccan on first sight.

⁸² Taoufik El Oufir, *Parcours d'Architecte Interview avec Taoufik El Oufir*, (Rabat: A+E Architecture et Environnement au Maroc, 2013), Interview.

⁸³ Faycal Sentissi, *Parcours d'Architecte Interview avec Faycal Sentissi*, (Rabat: A+E Architecture et Environnement au Maroc, 2013), Interview.



Co-Habitation in Marrakech, 2011, KLO Architectures (Tarik Oualalou and Linna Choi) This experimental project examines a valued aspect in Moroccan architecture, privacy. The project can be adjusted depending on wishes of the family, providing more or less private and public space. The architect has used his own interpretation of this and adapted it to the wishes of a modern family. The project is a good example of an experiment that helps develop the road towards housing projects that actually fit in the context, even though the target group are mostly higher incomes and the project might not be available for the average Moroccan family, it is a good step towards an innovative way of approaching tradition.



Agence Nationale pour la Conservation foncière in Rabat, 2014, Taoufik El Oufir Architectes

The facade of these buildings are embellished with traditional Moroccan tile motives, in contrast to the modern looking building blocks that store the ANCFCC. This motive is widely used in contemporary Moroccan architecture to refer back to identity and tradition. However, when combined with projects that are detached from the context these motifs are rather superficial than traditional.



Another influential Moroccan architect is Abdelouahed Mountassir. He mentions the importance of the city when it comes to creating housing. The city is in his words responsible for creating public spaces and buildings that can contribute to a better living environment.⁸⁴ Therefore the context is the most important aspect while designing, keeping in mind that a city can only survive if the necessary components are available. The relation with this context lies not in aesthetical points, but mainly in ethical points.⁸⁵ The value mentioned by Mountassir is mainly in the design of the public space and its relation to the private space. Since Moroccan cities as coping with strong uncontrolled urbanization, the importance of creating valuable public spaces is crucial.

A common point mentioned by the architects above is their admiration for architects with regionalist backgrounds, like Louis Barragan, Alvaro Siza, Louis Kahn. Earlier, the works of some of these architects were mentioned for their critical regionalist approach. It is remarkable that contemporary Moroccan architects are inspired by these architects, acknowledging the fact that these architects have influenced architecture in the periphery and embrace local identity while advancing with the universal. Nevertheless, we see mainly modern influences back in works like the ANCFCC by Taoufik el Ouafir in Rabat, with the use of superficial aspects to refer back to the region.

In the south of Morocco, this return to local tradition and ways of doing has triggered the interest of the architect Salima Naji. The richness of vernacular buildings in the high atlas that are in a bad shape were her inspiration to work for the maintenance of these buildings. Her work does not only show pride in the local tradition, working together with local people to establish this is of high importance for her work. In the modern architectural discourse of Morocco she plays a role that embraces regionalism and local ways of doing, inspired by the vernacular like the GAMMA architects, however aesthetically far away from this modern influenced architecture. She is mainly working with Berber tribes in the south of Morocco. Ksar Akkal is an example project that illustrates her interest for local materials and sustainability creating by regional construction methods. The project consist out of an hotel and spa and enables the visitors to get to know the region, not only by providing a view over the Atlas mountains, but also by staying in a building that is built according to vernacular Berber building methods. It is undeniable that this project fits in the context and represents local culture and tradition in high

⁸⁴ Abdelouahed Mountassir, *Abdelouahed Mountassir - Portraits d'Architects*, (2012).

⁸⁵ Ibid. Literally used by Mountassir: "Moins d'esthétique, plus d'éthique!"

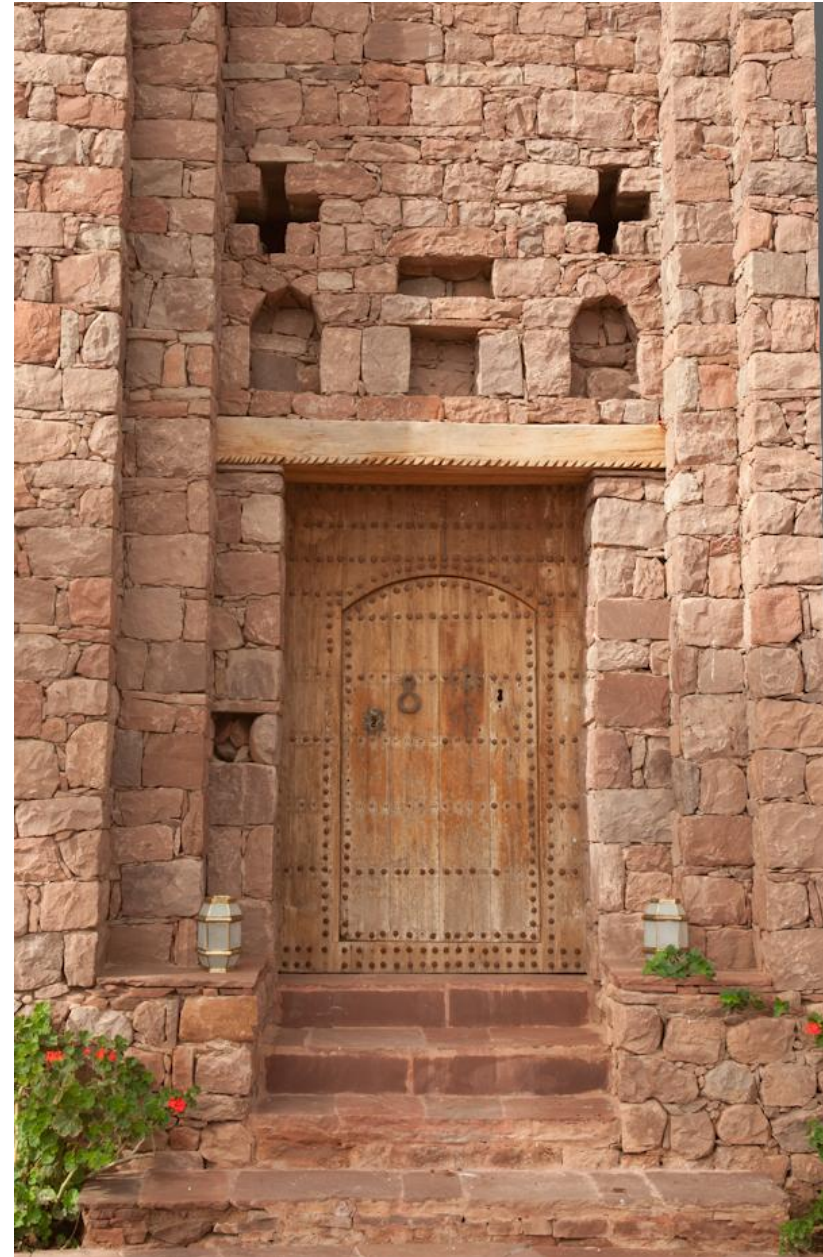
amounts, nevertheless, basing projects entirely on local ways of doing does not answer 21th century issues and provides no substitution for projects that are being build with industrial products.

The search for an approach more related to the context does not only occur in building, but also in the rehabilitation of public space in Moroccan cities. Aziza Chaouni recently led a project together with urban planner Takako Tajima in her hometown, the city of Fes, to improve the docks alongside the river that flows through Fes, it has suffered from pollution since the river has been covered right before and after the independence. Inhabitants used the river as dumping ground which resulted in very polluted water and areas around the quay that were full of garbage. She developed a rehabilitation of the riverside that improves the environment by creating attractive public spaces. The *medina* (old city of Fes) is one of the largest pedestrian areas in the world, by adding attractive pedestrian routes alongside the quay and adding public spaces, people are more careful when it comes to pollution and contribute to the conservation of the medieval city Fes.⁸⁶ This project has won the Global Holcim Award in 2009, for its contribution to the rehabilitation of Fes on an innovative and compact way. Not only was she capable to add valuable public space to the public realm, she used the most problematic area of the town to turn it into a place that contributes to the liveability of the city. The smooth relation between sustainable design and relation with the context is visible in this project, improving the relation with the environment while staying true to the original configuration of the *medina*.

⁸⁶ Aziza Chaouni, *A jewel of the city: Aziza Chaouni on restoring the Fez River, TED: Fellows Friday* (2014).



Ksar Akkal, 2012, Salima Naji This spa complex is found in a Berber village in the Atlas mountains, near Marrakech. The construction and materials are based on vernacular Berber building methods and are one with the context. Naji is an influential Moroccan architect with a regionalist view on architecture, respecting local culture and building methods without use of modern principles.





Fes riverside rehabilitation, 2010, Aziza Chaoui The quays of Fes have been the victim of pollution for the past era, suffering from a high amount of garbage and toxic substances, it was time that this area got a rehabilitation. The *medina* (old city) of Fes is one of the largest pedestrian areas in the world, by adding attractive pedestrian routes alongside the quay and adding public spaces, people are more careful when it comes to pollution and contribute to the conservation of the medieval city Fes.

Balancing Modernity and Tradition in Moroccan Architecture

We have seen that architecture in Morocco has always been coping with the tension between the centre and the periphery, during the colonial period the centre has implemented their ways of thinking in the Moroccan kingdom, it has contributed to the growth of the country, while taking advantages of the Moroccan Identity. Even though the influences of the persons coming the periphery, in this case Morocco, have been growing since the independence and are still growing today, the infiltration of the centre is still visible. The aesthetics of modern architecture are seen as equivalent to western architecture, this can be traced back to the luxurious dwellings that were kept for French immigrants in Morocco, while the locals had to survive with less. Today we see that Moroccan architects are looking for their own interpretation of modern architecture and how tradition positions itself in the architectural discourse. The 21st century is marked by the high importance of sustainable design, the current generation of Moroccan architects values the importance of this in their designs. Nevertheless, often the relationship between sustainable design and regionalism is missed, resulting in architecture that is based on sustainable principles, but lack the relation with the context in terms of use of material, configuration, labour and tradition. The future for architects working in the periphery lies in merging these aspects together, to create the best possible relation with the context while balancing this with innovative ideas. The task lies in preventing traditional aspects from only being implemented in superficial ways, and looking for a way that improves the appreciation of local tradition, without being obvious at first sight. This also includes sustainability, a crucial part of fitting in the context, which has to be present without noticing it. In the example projects we have seen that projects that do not mention to be sustainable, but rather look for a way to be sustainable while fitting in the context, are the ones most successful implemented. Since this is an upcoming topic, also in the non-western countries, the works of Moroccan architects should lose the image that sustainability is only possible by referring to western modernism and their advancement in technology, but rather search for a solution close to home which embraces the unfortunately often linked with being modern and not enough with using what you have from the context.

The Research of the Existing

The Housing Types of North-East Morocco

In order to get familiar with the North-East Moroccan context, we have to understand the ways housing is built in this area. The most common type in the North of Morocco is what will be called the modern Moroccan family house, this is a housing type that started to bloom in the 70's of the previous century. It started off as an outcome for low and medium incomes to create their own housing without aid from the government, on a lot bought by the dwellers themselves. Since this way of building promotes individuality, there is a lack of developed public space, in particular the infrastructure and drainage networks.⁸⁷ The second type is a more modern typology that was introduced by the government and project developers, creating affordable housing, not only aimed at the local people but also aimed at a considerable part of immigrants and tourists residing mainly in Europe. The characteristics of this housing type is that these projects are being produced in a large scale. They are often missing association with the site and the landscape and there is no relation with the natural resources and flora and fauna, resulting in projects that are lacking the environment in the heart of their process of design.⁸⁸ Housing types can also be categorized as the vernacular, which is created by the people themselves, with no use of an architect, it has evolved over time and is therefore the result of hundreds of years building in the region with regards of local material, local economy and tradition. Today we can see this category back in slum areas. Therefore we could say that this type is naturally adapted to the region and the context.⁸⁹ Nevertheless, this architecture is based on ancient principles, it is not possible to maintain this type of building because it does not answer today's needs. These building types provide a base to understanding the problematic and the strong points of architecture in Morocco.

⁸⁷ Zniber Mohamed Fawzi, "Research Needs and Priorities in Housing and Construction in Morocco," *Habitat International* 9(1985).

⁸⁸ Nacer Amiar, "Tendances Economiques: 'Boom' immobilier au Maroc," *Afkar/Idees* Hiver 2007/2008(2007).

⁸⁹ Mohamed Ben el Khadir and Abderrafih Lahbabi, *Architecture Regionales: un parcours a travers le Nord Marocain* (Casablanca: Najah el Jadida, 1989).

We have already examined the position of Moroccan architects in the 21st century architectural discourse, this provided information on how we should approach projects today and in the future. Nevertheless, this process can only be fully understood if we have an understanding of the projects that are being built in today, housing the largest part of the Moroccan population. This reality will be examined by making typological analysis of different Moroccan dwellings, from vernacular to contemporary. This text supports this visual analysis booklet by questioning the position of these different housing types and the way we can use this information to design a project that is related to the context. Since Morocco has very diverse landscapes and regions, this research will be focussed on the North-East region of Morocco.

The Various Meanings of Vernacular in the Architectural Discourse

The vernacular has been used as an inspiration and source of information since forever. During modernist movement we have seen that the vernacular has been studied and used to determine design decisions. As a reaction to these modernist movements, regionalist movements came about and embraced the vernacular as the perfect solution to relate to the context. Vernacular architecture is architecture created by the people themselves, without aid of an architect, as a result of years of adapting to the context. Vernacular is often seen as something contradictory to modernism and universalization, it is embracing local culture and tradition without using the solutions of modern day architecture. Nevertheless, this term vernacular can be interpreted differently by different persons, sometimes distancing it from this negative undertone that it completely neglects modern aspects to stimulate growth.

Hüppauf and Umbach talk about their meaning of vernacular in their book *Vernacular Modernism*, they define vernacular as the difference of place.⁹⁰ This difference of place is necessary in a world where modernisation is taking place, to restore a piece of identity.

*The vernacular is of interest to us where and when it elucidates how local and regional identities are constructed within - rather than against - the context of the modern.*⁹¹

Hüppauf and Umbach use term vernacular, not as a term to describe traditional elements or the native language, but rather as a way to describe the particularity of a place, the sense of a place. For them the importance of vernacular is tied with the word modern, the potential of using vernacular within modernism.⁹² They use the German word *Heimat* to describe this sense of place. Earlier we have seen that the word *Heimat* was linked to nationalist movements in Germany, to imply the superiority of one race over the other.

⁹⁰ Umbach and Hüppauf, *Vernacular Modernism: Heimat, Globalization and the Built Environment*.

⁹¹ Ibid., 2.

⁹² Ibid., 9.

This link between vernacular and modern is also described by Francesco Passanti, claiming that the vernacular helped to shape an architecture of modernity⁹³, he illustrates this with the work of Le Corbusier. Le Corbusier travelled to the Balkan in his young years to get to know the typical local traditions. This trip at the beginning of his professional career shows that the seen traditionalist concepts play a constitutive role in conceptualizing an modernist approach. After this trip he concluded that even though the vernacular is an expression of the pureness of a nation, they share with modern culture that they are vulnerable, and even more vulnerable than our modern culture.⁹⁴

The importance of the vernacular in order to understand a critical regionalist approach is interpreted differently by many. Frampton elucidates his point of view:

*It is necessary to distinguish at the outset between critical regionalism and the simplistic invocation of a sentimental or ironic vernacular. I am referring, of course, to that nostalgia for the vernacular which is currently being conceived as an overdue return to the ethos of a popular culture.*⁹⁵

The vernacular is originally something regionalistic, when used to please the nostalgic and sentimental nucleus of mankind, it loses this aspect that it was resurrected on a specific place and time on earth and.

The impact of the vernacular can be distinguished in two extremes relating to architecture. As we could see, the first one has a negative undertone which originated in the use of the vernacular to create a nostalgic and popular impact on the users. When the vernacular architecture of a certain region is analysed, it is important to distinguish the differences between it being an architecture created for a certain place, and ancient ways of doing. This particularity of the place, as mentioned by Hüppauf and Umbach, should be the main goal of doing an analysis on vernacular architecture. The danger of designing architecture based on a research on vernacular architecture could be that the results eventually end up being this popular architecture we are fearing,

⁹³ Francesco Passanti, "The Vernacular, Modernism and Le Corbusier," in *Vernacular Modernism: Heimat, Globalization and the Built Environment*, ed. Maiken Umbach and Bernd Hüppauf (Stanford: Stanford University Press, 2005).

⁹⁴ Ibid., 146.

⁹⁵ Frampton, "Prospects for a Critical Regionalism," 149.

idolizing the vernacular and using it to create something that was originally created for a certain time and place and does not fit in the present-day context.

In Morocco, the interest for the vernacular was part of the modern architectural discourse even before the independence of France. Firstly inspiring CIAM, where the interest for the vernacular remained mainly superficial, and later inspiring GAMMA in a broad variation of projects, of which a large part consisted of social housing projects.⁹⁶ Ecochard was mainly interested in the *bidonvilles* and the rural dwelling patterns in urban life, his interest for urban vernacular can be seen in the surveys he held before designing the 8x8 grid where he examined, among other topics, the appropriation of the dwellers throughout time.⁹⁷ We have seen that GAMMA, after the independence, also was interested in vernacular architecture, not only to analyse traditional building configuration and the use of spaces, but also to adapt a building to its climate and the way they were build.

These ways of using vernacular buildings to develop a modern approach towards architecture differ per person and are based on the architects own position towards this discourse. Nevertheless, we could all agree that the use of this vernacular analysis lies not in reusing the same ways of doing in a different era, but in using it to adapt in the best way possible to present-day aspects. This lies not only in material and aesthetical elements, like the use of materials retrieved from the site itself or decorative elements, but mainly in the adaption to the users and the climate conditions. Using vernacular inspired elements in 21th century architecture should not be superficial, but disguised in the project and adapted in innovative ways to this era.

If we are working towards the importance of the vernacular in the case of Morocco, the Arab World comes in sight. On of the most influential architects of North-Africa is Hassan Fathy, known because of his use of vernacular architecture to improve the inner climate of the building.

*The climate of the locality and the buildings around it mold the building, so that, even though social, cultural, and economic aspects are important, it owes much of its shape to these factors.*⁹⁸

⁹⁶ Chaouni, *Depoliticizing Group Gamma: contesting modernism in Morocco*, 78.

⁹⁷ Avermaete, "Framing the Afropolis: The African City for the Greatest Numbers."

⁹⁸ Hassan Fathy, *Natural energy and vernacular architecture* (Chicago: The University of Chicago Press, 1986). 4.

Fathy encouraged the fact that modernism does not embraces the vernacular and traditional ways of doing. He reinterpreted the traditional architecture by showing that an understanding of the place can contribute to the best climate possible only by using local materials. His use of this vernacular technology inspired a large group of architects. Unfortunately the project deals with some issues today regarding the materials used, but approximately 50 years after construction the system behind it still works.

*Although traditional architecture is always evolving and will continue to absorb new materials and design concepts, the effects of any substitute material or form should be evaluated before it is adopted... The modern academic world of architecture does not emphasize the value of investigating and applying concepts scientifically, and therefore, has no respect for vernacular architecture.*⁹⁹

Fathy does not necessary criticises the fact that we are transitioning in a modern society, but argues that the people adopting these ideas should remain critical and should question whether or not a change is necessary or important concerning the context. This is also the reason why people have no interest for the vernacular and neglect its importance in the architectural discourse. On the other hand, the vernacular is not something that stands still, even if we look at traditional ways of building, for example the Dogon dwellings who were studied by Aldo van Eyck, we see that they were created in a long process through time to adapt to the context, there is no point in time were the vernacular is standing still and does not know progress and adaption. Today, the vernacular also finds its shape when we notice that slums are in fact created by the people themselves which the materials and skills available. This corresponds with a quote by Fathy telling: Build with what lies beneath your feet. Where we see that the dwellers build their houses with materials found on site or near the site and who are affordable.

The vernacular can be used differently depending on the goals of the architect and their relation to the site. Using a critical regionalist approach and searching for this balance of tradition and modernism lies in understanding the vernacular and using the lessons it has learned us though time to improve the architecture of tomorrow.

⁹⁹ Ibid., 9.



El Gourna Village, Hassan Fathy, Egypt 1946-1952 Fathy's objective with this project was housing approximately 7000 people residing in a village that was built on the site of ancient tombs in the current city Luxor. Fathy used traditional techniques to solve contemporary problems resulting in a project that is economically and socially embedded in the site, empowering the local people by creating jobs and by inspiring them to be a better architect. Unfortunately the political conditions did not encourage the project to be terminated and the project was not carried out entirely. Today, the dwellers remark problems in the use of salt stone as foundation, which solves in combination with water, the village is considered a monument and today they are making sure this heritage is preserved.

Vernacular Housing in North-East Morocco

Morocco consist of a mixture of different settlers, the Berbers, Carthagians, Romans and Arabs. Especially its location in the North of Africa, with the street of Gibraltar made it an interesting spot for the colonists and early settlers.¹⁰⁰ This diversion is also remarkable in the vernacular housing in Morocco, which can be divided in different types, concerning the region and the local climate. Most Moroccans are descendants of indigenous Berber tribes, mostly residing in the mountains, the subdivision of the Rif, the Middle Atlas, the High Atlas and the Anti Atlas is related to the different Berber tribes that also have their own language. The *kasbahs* (enclosed towns) are related with these different tribes, that value the importance of family and bonding.¹⁰¹ Two types that are mainly linked to vernacular Moroccan architecture are the nomad tents and the *kasbahs*. In the first tradition of nomad housing, women played a huge role because they were responsible for providing housing, this resulted in them being the architects of the nomad tents. Since these building types were particularly applied in the south of Morocco, they were adapted to the hot desert climate. We saw that this type of architecture was used in an contemporary setting to promote Moroccan tradition and culture at the IMA in Paris, but this time not constructed with only traditional materials as wooden poles¹⁰², but with steel elements. The southern building type is the *kasbah*, especially found in the Atlas mountains and the desert regions. These are enclosed towns with high density housing, which is incremental when family compositions change. They were based on providing protection from the invasion of the Arabs and the Berber tribes themselves. A *kasbah* was usually inhabited by one family, protecting their own property, when different *kasbahs* are brought together it becomes a *ksour*.

Since Morocco consist of a broad variation of climates, the vernacular architecture differs a lot throughout the country. These *kasbahs* and nomad tents are mainly found in the south, not in the North-East of the country. The vernacular in the North is less known, since the focus in this study will be on the North-East part of Morocco we will examine vernacular housing in this area. This architecture shows the position of the people and their local and regional

¹⁰⁰ Elleh, "The Architecture of the Kingdom of Morocco."

¹⁰¹ Ibid.

¹⁰² Paul Oliver, *Dwellings: The House across the World* (Oxford: Phaidon Press Limited, 1987).

solutions to different problems, topography, context, climate, light and tectonic form. The vernacular architecture of the Northern region of Morocco is less known than other traditional types of art like music, clothing and jewellery.¹⁰³ One of the reasons for this is that this architecture might not be strong enough on terms of their vulnerability to survive in modern times. On top of that, traditional architecture in this region has not been examined by a lot of researchers, unlike the vernacular architecture of the south. This prevented the knowledge of traditional architecture in the North from spreading and caused it to remain on the background. Mohamed Ben el Khadir and Abderrafih Lahbabi where one of the few that researched the vernacular housing in the North of Morocco and they based the importance of their research on the following:

"Regional architecture, as it stands today is often a superposition of shapes, materials and various techniques, replacing the original architecture which is becoming increasingly sparse and endangered: taken into account this dynamic of mutation, the importance of analyzing regional architecture becomes clear"

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They define this regional architecture not as architecture that is build on a 'Moroccan' way but more as an architecture that represents the location and that solves local problems in different ways throughout the North of Morocco.

One of their researched areas in the North of Morocco is the Moulouya Valley, west and south-west of the city Berkane. The vernacular architecture in this region is mainly one or two storey's high and consist of a patio, sometimes positions in the centre of the building an sometimes in the corner, all rooms are connected to this patio. Another region is the Rif-Oriental, which is the beginning of the Rif mountains. As seen in the typological analysis, these buildings have a patio that is found in the centre of the building or in the corners, connecting all the rooms to an open space. The living room is connected to the front door and has an entrance that is out of sight of the rest of the dwelling, mainly because of privacy. This is also linked with the religious

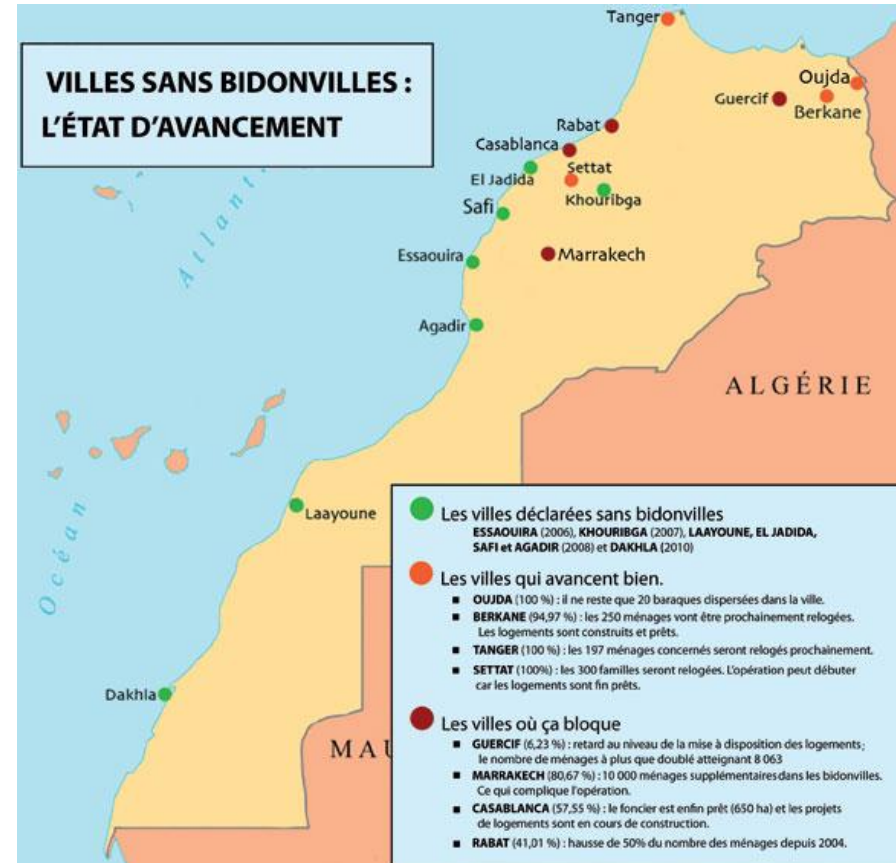
¹⁰³ Mohamed Ben el Khadir and Abderrafih Lahbabi, *Architectures régionales: un parcours à travers le nord marocain* (s.n., 1989). 9.

¹⁰⁴ Ibid. Translation from French: L'architecture régionale, telle qu'elle se présente aujourd'hui, est souvent une superposition de formes, de matériaux et de techniques diverses, supplantant une architecture originelle de plus en plus éparse et en voie de disparition: c'est compte-tenu de cette dynamique de mutation qu'il convient d'analyser l'architecture régionale.

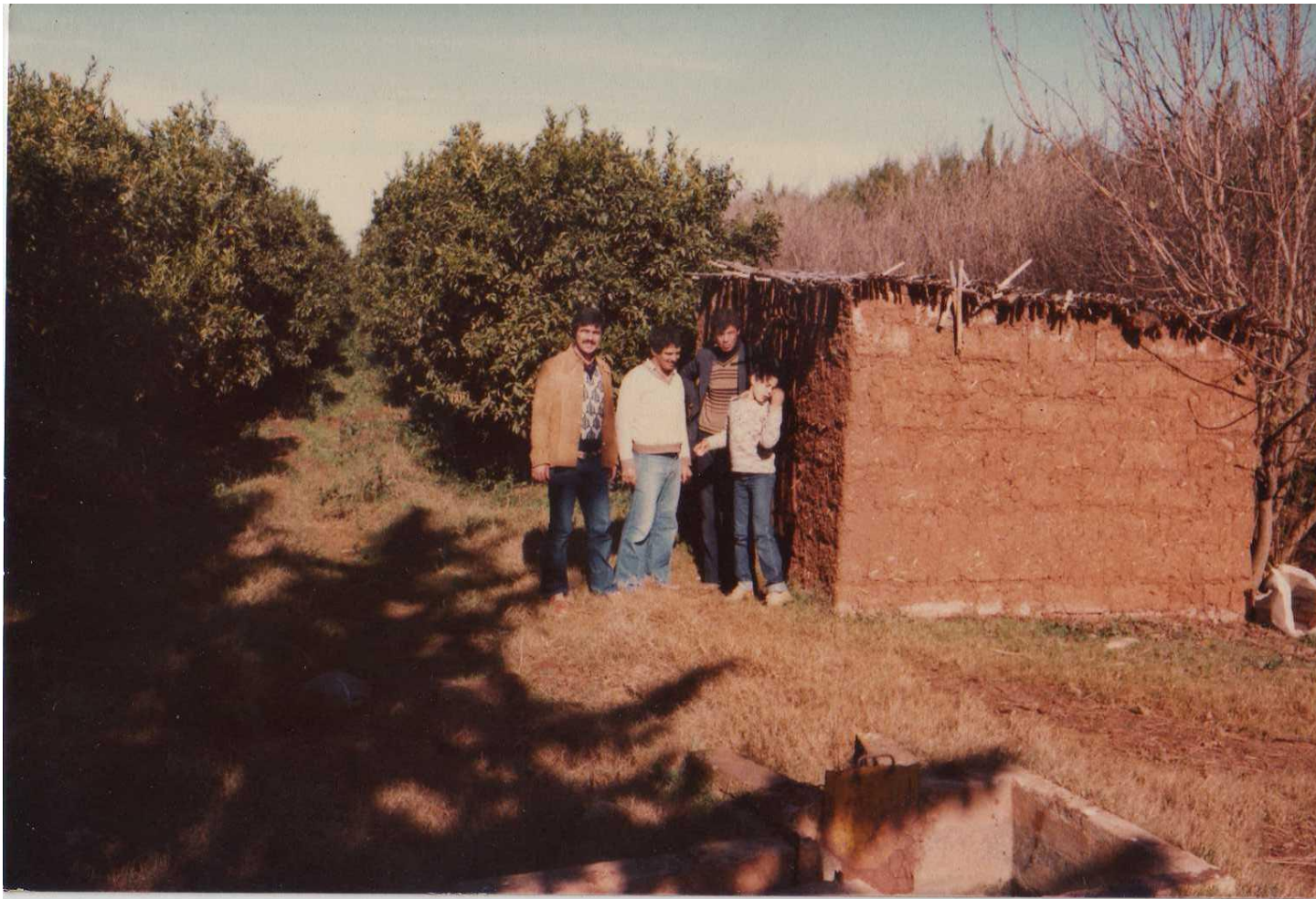
background of the dwellers, dividing the guests in different rooms according to their gender is an Islamic justified aspect which can be found in dwellings throughout the Islamic world. Nevertheless, on daily basis this division is not made and one household normally resides in one room together that functions as the living room. Another aspect in rural vernacular architecture is the presence of animals outside the dwelling, little changes are made to the exterior of the building to provide space to store and care for animals. Sometimes by the addition of a wall and sometimes by adding a small cabin on the site next to the dwelling.

Another less mentioned type of the vernacular category is the slum dwelling (*Bidonville*), this type of dwelling is unlike the rural vernacular, not found in ancient cultures and has recently developed since the establishment of large cities and urban fabrics. This type is mainly build by the dwellers themselves with a low income in urban areas where they moved to find work. The building materials are usually hollow bricks and/or steel plates as roof and walls. The dwellings are small and based on the available recourses of the family. Unlike the rural vernacular, patio's are not very likely to be find in these dwellings since they are more expensive and the open space between these dwellings are used for activities that normally occur in the patio's like cooking. These kind of vernacular slum-like dwellings can be found in the bigger cities in Morocco, like Casablanca, which has large amounts of informal settlements. The North-East region however has less informal settlements also because the dwellers with a lower income mainly reside on the countryside instead of in the city centers.

All this types can be categorized as unplanned dwellings, since the site and the building itself are completely chosen by the dwellers themselves and require no outsiders to plan with them. The difference however is that these modern vernacular slums are do not have climate as the highest priority, whereas the vernacular has been dealing with climatic issues since the beginning of time and has adapted its shape and use of materials to create an architecture that is there to stay.



Plan that shows the existing of Slums in Moroccan cities Slums can be considered as modern vernacular buildings, people build their dwellings themselves with the materials they have near them. The green cities are marked as cities that are free of slums, the orange the cities that only have few slums left but are also free of them, and the red that have a problematic amount of slums that can't be solved in the near future.



Vernacular building in the North-East of Morocco The North-East region of Morocco is known for its agriculture, mainly the production of citrus fruits. In harvest times the owner of the land uses this building to store materials and to guard the area. The building has a traditional roof and wall type made of adobe with materials that are available on site.

Present-day Housing in Morocco

Present-day housing in Morocco basically consists of the modern Moroccan family houses and the apartment block, the first type is the most common type in Morocco, the modern family house that started to bloom in the 70s of the previous century.¹⁰⁵ The design process of modern family houses usually do not include the involvement of an architect, the constructors deal with the ability to build this housing type and the family that is planning on living there chooses the spatial configuration and the aesthetics of the building. Since this type was mainly build by and for low/medium income families the price and size of the house are linked to their abilities. Nowadays, this type is also used for higher incomes, resulting in an architecture that consist more decorations and dwellings with a bigger size, even villa's, adapted to the economical status of the dwellers. The second most upcoming type in the North-East of Morocco are the apartment blocks, this type is highly planned and often developed by project developers and build in large quantities around the whole country. Since this type provides a higher density and affordable apartments, it is very popular especially under the Moroccan immigrants, wishing to spend their free days in their home country. Even though this type succeeds in providing low cost housing and a higher density, its architecture is similar in all the different climates of Morocco, resulting in an architecture that does not fit in the region.

In the construction of the large scale housing projects, the property developers play the main role. Approximately 8 years ago, a company that belongs to Spain, Fadesa, has invested in the creation of housing projects and touristic areas in the North-East region of Morocco. One of their biggest projects in this region was the creation a the touristic area on the Mediterranean Seaside, Saidia, this project started in 2007. In 2003 they signed a convention to preserve and protect the environment. Nevertheless, they broke this covenant by disrespecting the dunes in this area, removing the sand from the dunes to create hotels and resorts that are connected to the coast, resulting in an infringement of the protective dunes.¹⁰⁶ These category of projects are not only detached from the context, they damage the context extremely and are one of the reasons why a new approach is drastically

¹⁰⁵ Mohamed Fawzi, "Research Needs and Priorities in Housing and Construction in Morocco."

¹⁰⁶ Marc Salmon et al., "L'Érosion des Côtes Meubles de l'Extrême Nord-Est du Maroc," *Bulletin de la Société Géographique de Liège* 2010.

needed. Since these projects are usually financed by big companies, the danger of extremely long waiting time for the keys mounts up. Sometimes companies go bankrupt, especially since the crisis in most Mediterranean countries, and projects are being interrupted in the middle of their construction period.¹⁰⁷ This has already resulted in people that cannot enter their homes even if they fully paid for their dwelling. Since there is no clear phasing in the design process and the building process, this risk is even higher. The configuration is usually based on modern principles and western ways of living, there is no patio and all the rooms are only accessible through the living room. Private open spaces are small balconies and public open space is found on the ground floor.

The lot-divided housing projects are usually restricted to a couple of rules, at first of course a permission to build and to live.¹⁰⁸ Even though this is officially needed before starting a project, in practice this occasionally does not happen. The dwellings are designed by the dwellers themselves with the aid of construction workers and are adapted to the income and the wishes of the future dwellers. The period between the urban vernacular and today has been influenced by the French during the protectorate. People that were immigrating from the mountain areas to the city during this period have built their houses based on vernacular principles, in 'modern' cities. This in combination with the French, that created their own modern building blocks in these cities, have influenced architecture to develop while mixing vernacular with modernism. This resulted in a difference between older and newer semi-planned housing. The older type had more links with the vernacular architecture in terms of configuration and division of public a private space and the new one is based mainly based on the wishes of mainstream habitants, that see western influences as an equivalent for modernity and progress.

¹⁰⁷ Jorge Larios, "Property Developers Type 2 (Morocco)," (2014), <https://saidiarecov.wordpress.com/2014/10/14/types-of-moroccan-developers/>.

¹⁰⁸ "Rapport d'activités de la Direction Régionale de l; Oriental Durant l'année 2012," (Oujda: Royaume Du Maroc, 2013).



Two types of lot divided dwellings in Berkane, Morocco The lots are sold to private parties, depending on their economical status they decide where and how much facades the lot they are buying has. Through time the dweller can add storey's or they decide to build all storey's at once. When the owner invests in a lot he usually builds apartments which he can sell to different owners, that way one single plot is inhabited by different families. The pictures show two variation, a single family house on the left and an apartment building with two facades on the right. Since individual preferences have enough space in this system, there are enormous variations of dwelling types possible on one lot.



Apartments blocks constructed in great amounts in Saida, Morocco Since the need for higher density and more affordable dwellings is increasing, and the urbanization in cities is booming, the need for large scale projects is increasing. Project developers have invested a lot in creating these apartment blocks, mostly reproducing the same floor plans uncountable times and unattached to the context. When the first blocks are constructed, the infrastructure still needs to be fixed, which results in problematic issues for the inhabitants. This example can be found in the city Saida, a coastal area next to the Mediterranean sea and the Algerian Border. Mainly providing housing for the Moroccan immigrants that desire to spend their holidays in their home country.

Characteristics of the Site: Berkane

Berkane is a city in the North-East of Morocco, situated in the Oriental region (Région de l'Oriental) of Morocco. The Oriental region consists of the province of Berkane, and seven other provinces. The province has 6 urban communities and 10 rural communities.¹⁰⁹ The city is located at approximately 25 kilometres from the Mediterranean ocean and the two bathing places Saidia and Cap du L'eau, the first one attracting a lot of tourists in the summer period. A river named Moulouya divides these two bathing places. The mountains can be found at 15 kilometres south, the places Zegzel and Tafoughalt are known mountain villages that are not further than 20 kilometres from Berkane. These mountains do not belong to one of the four mountain regions of Morocco. (Rif, Middle Atlas, High Atlas and Anti Atlas), they are called the Beni Snassen mountains.

History

The city was established at the beginning of the years 1900, and was built on a site where there were ruins of an old village. The population came from the surrounding mountain areas (Beni Snassen) and their roots can be traced back to Berber tribes, currently these tribes are mixed with Berbers and Arabs and the main language is Moroccan Arabic (*Darija*) whereas a part of the population also speaks the Berber language. The French occupation of this area in 1907 triggered the establishment of the city, providing housing for the French and public buildings such as a church that is still present in the city. This occupation lasted until 1956, three years after the Moroccans started their national uprising against the French. Before the border with Algeria was closed, this region was on the trading route of Morocco and Algeria, mostly between Fes and the Algerian city Tlemcen.

Population

The population of the city is approximately 100 000. The region consists of 6.6% of the entire Moroccan population with a density of approximately 21,4 habitants/km².¹¹⁰ The centre of the city has a density that can amount up to 5000

habitants/km², unlike the rural areas, like the mountain village Tafoughalt, where this could be 20 habitants/km². A high amount of the habitants work in the crafts, which consist out of various disciplines like tailor work and tile makers. During the summer period a lot of immigrants that live abroad come back to the city, residing in their own dwellings or in dwellings shared with their family. Since the amount of these shared family dwellings is stagnating, they often wish to reside in their own small apartment building.

Climate

The climate in the North-East of Morocco can be considered as a Sub-Tropical Mediterranean climate, this climate type has three subclimates which are marine, continental and mountainous.¹¹¹ The summers are warm and hot and have little rain and abundant sunshine, in the winter the weather is mild and there is moderate rainfall. In the winter the minimum average temperature can be 7 °C, in summer there falls less than 2.3 cm rain in the three hottest months, June, July and August. In these periods the maximum average temperature can be 33 °C.¹¹² There are two directions of winds, the northern winds that come from Europe are colder and humid, the Eastern and Southern winds that come from the desert are dry and hot. Dwellings are usually not occupied with a heating system, in the winter it can be very cold in houses and most people solve this by wearing more layers of clothes. During the summer the heat can be unbearable, mainly when the sun is at its highest point, people often take a break from work in this period. Most modern houses are occupied with an air conditioning system, often added to the building by the habitants themselves. Most houses that are positively oriented towards the sun do not need this system and provide an agreeable climate in the shadow, especially the dwellings that use the traditional principle of a patio, which provides natural ventilation and creates shaded outdoor areas.

Industries and materials

The region is known for the large production of citrus fruits, agriculture is the main source of income. Recently an agricultural centre has been built for research. The region knows a couple of industrial units especially around the cities Oujda and Nador, 60 and 80 kilometres from Berkane. One company is Holcim, a factory in Oujda that is specialized in the distribution and production

¹⁰⁹ RDM, "Monographie de la région de l'Oriental. Mission 3: Rapport sur l'état de l'environnement régional," (Oujda: Royaume du Maroc: Haut Commissariat au Plan, 2012).

¹¹⁰ Ibid.

¹¹¹ Allan Konya, *Design Primer for Hot Climates* (Archimedia Press Limited, 2011).

¹¹² "Climat des villes," Maroc Météo, http://www.marocmeteo.ma/?q=fr/climat_villes.

of cement. Sonacid is a company that is specialized in the production of reinforcement steel. These factories made it possible for the large scale housing projects to expand, providing them the building materials needed.

Monuments, Culture & Religion

Mosques are the most aesthetical architectural buildings that are remarkable in the cities. The colonial period also left their traces with a church in the city centre and several buildings built for the French habitants of the city, which are currently dwellings for the local people or stores, whereas the largest part is replaced for modern buildings. Reggada music is the trademark for this region, it is especially known for the shoulder-dance that goes with the music. The main religion is Islam, during the French protectorate there were also Christians, mainly the French and Jews, who were native Moroccans.

Public spaces

The city only consist of 1-2% green spaces in the urban area. Since the Moroccan government has set this to be approximately 12m²/habitant, it shows the lack of green spaces. The last couple of years the public spaces around the central boulevard have been in development and show the potential of improving the city its liveability. Nevertheless, this is only applied in the areas close to the main boulevard, leaving the residential neighbourhoods without any type of public space. Another problem with public and green spaces is that the ecology is not respected, resulting in the cutting of old trees and ecosystems to make place for new designed projects.¹¹³

Housing projects in Berkane

Housing is mostly developed through lot-divided housing, where the government is only responsible for creating roads and public spaces and individuals can buy lots to build their own houses. These so called *lotissements* (combination of several lots together creating a masterplan) like Bab el Medina, Ryad el Medina and the future project of Al Medina Al Jadida, are mainly located on the outskirts of the city next to the main roads. Each year approximately 600 new building permissions are being given and 300

dwellings are build in the province of Berkane (the city and close rural areas).¹¹⁴ This is an estimation of how many dwellings are being build because the amount is much higher in practice, since building permissions are not always asked before building a dwelling. The amount of salary that is spend on housing (renting, electricity etc.) is approximately 15% and relatively low in comparison with western countries. The different housing types have a different distribution in rural areas and in urban areas. The following scheme shows these differences:

Type of dwelling	Urban area of Oriental region(%) ¹¹⁵	Rural area of Oriental region(%) ¹¹⁶	Berkane (%) ¹¹⁷
Villa	2.7	0.4	1.7
Apartment	3.8	0.2	2
Traditional Moroccan house	19.8	14	15.5
Modern Moroccan house	65.3	20.3	73.4
Slum-like dwelling	3.8	3.2	4.2
Rural dwelling	0.1	52.8	0.2
Others	4.5	9.1	3
Total	100	100	100

We notice that the Modern Moroccan house is the most frequented building type, this dwellings are build on lots provided by the government or by the lot owners themselves. The amount of residents in apartments is less because this period of time the big projects were not yet developed. A problematic issue is the increase of human density, which is resulting in the lack of public space and green in-between the lots.¹¹⁸

On the south of the city, near the area Sidi Slimane, a big project just recently started to improve the living environment and to give structure to the fast urbanisation of the areas attached to the main roads. The density varies from 200 habitants/hectare to 120 habitants/hectare, with a gradient from the

¹¹³ Mohammed Saddik, "Berkane : ville verte sans espace vert," (2011), <http://www.hee.ouvaton.org/spip.php?article230>.

¹¹⁴ "Rapport d'activités de la Direction Régionale de l; Oriental Durant l'année 2012," 10.

¹¹⁵ RDM, "Monographie de la région de l'Oriental. Mission 3: Rapport sur l'état de l'environnement régional."

¹¹⁶ Ibid.

¹¹⁷ Ibid.

¹¹⁸ Ibid.

nearest area next to the road towards the countryside. This illustrated that the density next to the main entrance roads are bigger because of the easy access and finished infrastructure, plots who are less accessible are less likely to be bought, which makes the density lower.

The government mentioned a couple of aspects regarding the built environment in the Oriental region¹¹⁹. which are named below:

- Urban areas are growing in a fast and uncontrolled way
- Degradation of the built environment
- The proliferation of illegal housing
- The deficits in infrastructural equipment
- The damage of urbanisation build on sensible areas
- The absence of green spaces in urban areas
- The extension of urbanisation at the expenses of green areas in the urban space
- The intensive agriculture and its effect have created, particularly in the city Berkane and its periphery, uncontrolled urbanization, invasive and characterized by the increase of spontaneous neighbourhoods and unauthorized construction.

All these points are trying to be solved in the new projects the city is developing mainly on the outskirts of the town, providing a planned urban area that consist out of plots which have a developed infrastructure and public space integrated in the plans, nevertheless, this does not solve the lack of quality that is present in way of constructing and the lack of sustainability both in the orientation and in the social sustainable aspects.

Future visions

Today the necessity of creating a durable and sustainable environment has penetrated in the minds of local habitants. An area in Berkane that addresses this need for a different way of thinking is Douar el Mika (the neighbourhood of plastic bags). This area in Berkane is known for its extreme pollution of plastic bags, of which the consumption per year per person is approximately 9kg. This combined with the high amount of craftswomen in Berkane has used the opportunity to create crafts while recycling these plastic bags, afterwards these products are sold in stores and online for a price that helps the local woman to

make a living. The government is also focussing on the entrance areas to the town, who cut through the city connecting the different neighbouring towns with Berkane. The amount of housing projects created on the outskirts of the city are growing each day, having huge influences on the way the city looks towards people that use these entrance roads and on the quality of living for the habitants. The presence of the river Moulouya has brought the topic of pollution and water management as a topic of interest. Projects are developing to improve the water quality in the region and to prevent waste from entering in the ecosystem. Water is also an issue because of the extensive rainfall that occurred several times, since the built environment was not build for these floods, the future has to bring solutions for these problems. On the outskirts of the town new projects are implemented to provide the necessary density and to house the increasing amount of dwellers, these projects are mostly built on a tabula rasa and have no connection to the enamouring dwellings.

The Future of Housing Types in North-East Morocco

The vernacular has been a valuable source of understanding the context and relation to the site, on the other hand it is not a solution for present-day problems as the increase of density and the availability of modern construction methods. The answer by project developers has been the construction of large amounts of apartment blocks, providing affordable housing and a higher density, but lacking any relation with the context. This transition between the vernacular and this large scale apartment blocks has been quite fast, the only type that can be found in between is the private lot divided housing, which leaves place for the individual wishes of the dwellers but in the mean time deals with a lack of organisation and therefore a lack of public space and weak relation with the context.

When creating new types of housing, alternatives for these problematic projects should be illustrating how it should be done. Therefore a method is needed that can be embedded in the current ways of building, improving the lot-divided and the large scale housing projects or introducing a new system that combines these two to attract the same target groups without losing the attachment to the context.

¹¹⁹ Ibid.

Conclusion

The Contribution of a Critical Regionalist Approach in Creating Balanced Housing in North-East Morocco

In a world where western universal culture is seen as the benchmark of success, the need for individuality and creativity is at its highest. The contribution of a critical regionalist approach to balance modernity and tradition mainly lies in encouraging architects to have a critical view towards the context they are building in and their position as an architect to encourage creativity.

Having a critical regionalist approach towards architecture is encouraging architects to work towards balance and consider the context as the first and foremost aspect considered while designing. When this approach is adapted by an architect, we see that the focus will be on acknowledging reality instead of only picking elements that are beneficial for a certain actor involved, whether it is the project developer or the dweller. We have seen that this resulted in projects where the architect even left certain aspects of his role as designer to the people themselves, resulting in a balance between the designed and the individual input.

Along with this critical regionalist approach the necessity of knowing the context is a reality. We have seen that architects who were too hypnotized by being modern were only attempting to know the context on superficial ways and neglected the aspects they saw as less important. Knowing the context is linked to analyzing the existing before the actual designing takes place, regarding vernacular architecture this can inform the architect on various aspects that the built environment dealt with and how the people solved these problems with the available elements. On terms of climate for example this contributed to simple and affordable ways of creating the best possible inner climate in a dwelling. On the other side, we have to be careful in letting or often unintended biased opinion direct us in a certain way of getting to know the context, an example is this use of the vernacular while designing and neglecting the current ways of building which also have been established on

ways that improved the living conditions in any type of way. This is linked back to the necessity of acknowledging the reality and using this instead of only selecting what is pleasing the mind.

The future of creating housing projects lies in balancing, not only in terms of the products the architects produces, but mainly in the design process. This goes hand in hand with the ability of an architect to leave certain aspects open and flexible, since the one of the main functions of the architect is translating people's needs into smart solutions. The North-East of Morocco has dealt with several developments regarding the built environment. Not only on levels of urbanization but the city centres are also changing because of the increasing density and need for more public spaces. Since this development took place rapidly, the transition from traditional to modern had no time to use the best of both worlds, resulting in a loss of identity and placelessness in architecture.

To establish this relation between tradition and modernity, we have to work towards a balanced architecture, where balance is seen in the whole process of dealing with reality and providing better solutions for the future. Since this is tension between modernism and tradition is visible in all domains in our daily life, it is up to this generation to find the balance and maintain identity while advancing.

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How can a Critical Regionalist approach contribute to balancing Tradition and Modernism in housing in North-East Morocco?

