



CIGLER | MARANI UNLIMITED

Ethiopian Institute of Technology – Mekelle የኢትዮጵያ ቴክፕሎጂ ኢንስቲትዋት - መዋሰ Mekelle University መቸስ ዩኒቨርሲቲ

MEKELLE UNIVERSITY AND CIGLERMARANI UNLIMITED

MU AND CMU



The workshop "Find it and use it!!!" is continuation of successful workshop collaboration between Ethiopian Institute of Technology in Mekelle, Department of Architecture and Urban Planning and architectural studio Cigler Marani Architects (exactly its division for sustainable architecture within human commitment Cigler Marani Unlimited).

The collaboration started in 2013 with 2month long workshop called "Think globally, act locally!!!" on design of primary school in Northern Ethiopia.

We have merged our skills and capacities to organise student workshops regularly. Our goal is to enable students think out of the box, find alternatives and be comfortable with design in real conditions.

Hopefully, the international team of instuctors will be soon reinforced with a participance of foreign students form partner institutions.



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The Ethiopian Institute of Technology in Mekelle is part of Mekelle University that has short but complex history. The city of Mekelle is situated in northwestern Tigray region, in the region rich in cultural and architectural heritage. The Institute offers various programmes – architecture and urban planning among them.

The contact initiation intented to diversify inputs for the architectural research led with other partners. When got known each other we have decided to cooperate directly on academic level.

In 2013, there was a 7week long workshop called "Think globally, act locally" for a hundred of 4th year architecture students. The workshop aimed to find sustainable ways how to design schools and educational buildings, how to make the surroundings inspiring and motivating, how to think progressively and alternatively, how to engage community, how to contribute to the development....

In 2014, here we go.... There is a new worskhop on public space focused on "forgotten" aspects of open spaces in condominiums...



CIGLER | MARANI UNLIMITED | CMU is a section of Cigler Marani | architecture | within human | commitment | architects studio founded on reflecting the sustainability of worldwide architecture and the good quality design accessibility.

> The architecture is more than a design; it can solve and create problems at the same moment. The architecture of good quality is natural. If it works, it promotes the development. The inspiring environment is the background for the progress. It is not only about a physical protection and shelter. When the basic needs are fulfilled, people search for the motivation and stimulus.

> It is clear that the good architecture is not about loads of money but about ideas. That is why their goals are ::: to assist to identify sustainable architectural principles :::

> ::: to promote new/old technologies and encourage new ideas and concepts in architectural design while respecting specificity of different communities :::

> ::: to interconnect the humanitarian, academic and private sector - multistakeholder partnership :::

> ::: to support architects' creative, technical and cultural talents :::

http://unlimitedcma.com



# WHAT CAN YOU FIND The following pages present the exist-

INTHIS BOOKLET ??? ing condominium COMMUNAL SPACES design that respects local administrative standards, and still offers a room to alternate, adapt, im-

prove and INNOVATE.

Following chapters describe the existing conditions in various condominiums by different analysis approaches: comparison of open spaces in condominiums with traditional houses, description of toponomy and identity and nature of the society.

The student designs were regrouped into two major topics: Condominium Look and Landscape and Hardcape Design in Open Spaces in condominiums. In general, these are innovations that are applicable on existing design separately or in combination. The final innovation compilation depends on the condominium site, local community, local authority, focused goals and financial capacity.

The book is completed with references from abroad in last chapter.



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LANDSCAPE'N'HARDSCAPE 63 ELSEWHERE 87 国国

All over the world countries face the rural exodus and increasing of urban population which results in housing problems in cities. The formation of slums is inevitable. Ethiopia itself was confronted with statements of diverse institutions that up to 80% of housing in its capital Addis Abeba were classified as slums. More or less exorbitant claims about traditional kebelle houses and daily real life led into an enormous challenge.

The Ethiopian Integrated Housing Development Programme was established as a reaction to national and internation claims about housing challenge in the country. The program set an ambitious initial target of constructing 400 000 standardised and affordable condominium units between 2006 and 2010. The apparatments are in multistoried blocks where communal areas are shared by inhabitants - low and middle-icome Ethiopians.

based on "The Slogan and the Whisper"
... presentation prepared
by Dr. Antarin Chakrabarty

EIHP THIOPIAN INTEGRATED HOUSING DEVELOPMENT PROGRAMME

::: 400 000 HOUSING UNITS PLANNED IN 4 YEARS

::: 200 000 JOBS IN CONSTRUCTION INDUSTRY

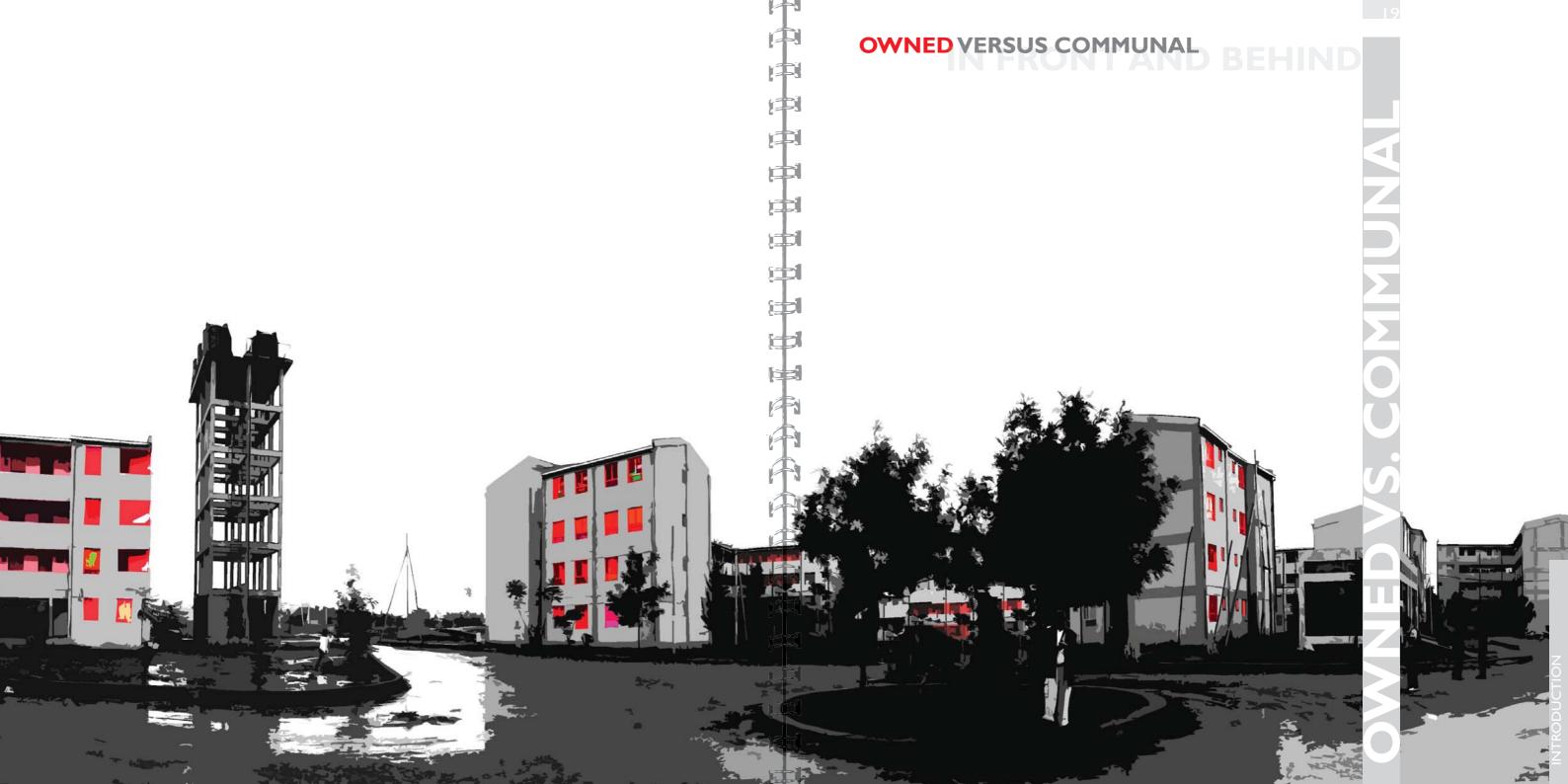
::: DVLPMNT OF 10 000 SMALL **ENTERPRIS-ES** IN THE CONSTRUC-

::: 6 000 HA OF SER-VICED LAND FOR HOUSING AND OTHER INVESTMENTS

TION INDUSTRY

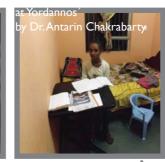








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The majority of condominium inhabitants appreciate the privacy, safety and confort of their appartments. Very often, they convert their rooms according to their own comfort and taste. Various colours, dispositions and materials of diverse quality might be found behind the metal door. And the most significant is the appearance of maintenance...

But this is not valid for the common space, which is left abandoned in many cases. It suffers from the fact that it is used by everbody and owned by nobady.

The frequent complaints about condominums are poor maintenance of public spaces and weak residents' association.

research by Dr. Antarin Chakrabarty



the time of urgency and capacity building is over, we might take charge to think DEEPER, to plan BETTER and to create NICER...

to think GLOBALLY, feel, UNDERSTAND and deal with PUBLIC spaces, with neglected and hidden spots, to respect the local conditions, URBAN population, to turn the condominiums into the places OVERFLOWING with inspiration and MOTIVATION, to ATTRACT people to care about it, to make it as an example worth following, to think PROGRESSIVELY and SUSTAINABLY, to use LOCAL materials, to use secondary materials - to RECYCLE and REUSE, to engage community, to make the COMMUNITY feel the OWNERSHIP of the space that is of nobody and everybody uses it, not to solve only a physical problem, but to create a contribution to the DEVELOPMENT...

the existing condominium design follows the administrative standards, but THERE IS STILL A ROOM TO ALTERNATE, ADAPT AND IMPROVE.



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## COMPARISON OF APPROACHES

### ADDIS ABEBA

In Addis, the condominiums are more vibrant with lots of commercial places, lots of people hanging out at the common spaces which are well furnished and full of greenary, e. g. the site Jemo, Mebraht Hayl (Kera)

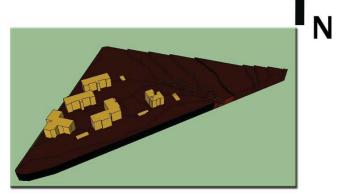
### MEKELLE

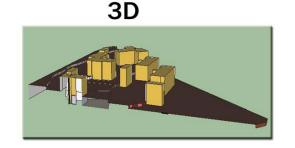
In Mekelle, in the capital city of peripheric region Tigray (northern Ethiopia), condominiums are rather cold, and they look abandoned because there not many people hanging around, there very few commercial places et.



# **KEBELLE 17"CONDO"**

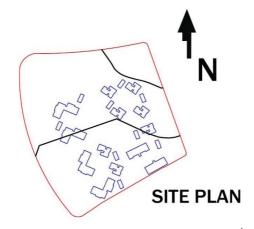
SITE PLAN

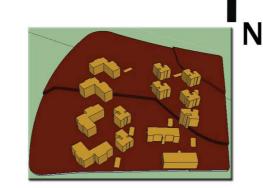




**SECTION** 

### **AYDER CONDOMINIUM**





**3D** 



# **TOPOGRAPHY AND CONTOURS**

The topography of the K17 condominium site is influential to the landscape because of the inclination of the site, it has also river which pass through the site which we can take it as the potential of the site for the landscape. but when we come to sensory the seconed one the hyder comdominium site its almost flat so the counture of this site is not that much influential to the landscape.





the site is foundaround Gebriel church

sound polution from the cheurchs and the local shops and we notice some bad odure come from the site septi thank

### utilites

all the necessery uutilites are stesfied in thesite like thelectricity and water lines

# climate

the site have dry and windy climate

# Existing structure

as the site is newly founded there is no existing structure and cultural area

rounding
the site is surounded by some high populated villas, church and markets not forgating the river near by

# copograpy

the site is slopy that is deppresed to the middle of the site

### vegetation

We observed there are some vegetation around and inside the site like eucalaptus, neem

### circulation

the site can be accessed easly and near to the transportation system





BUILDING FACADE TREATMENT ACCORDING TO LOCATION

Water tower
 it looks like it is a waste of resource and space

.....nonstructurant colors

· · · I v antennas

·····open space or land scaping

no building placement created negative

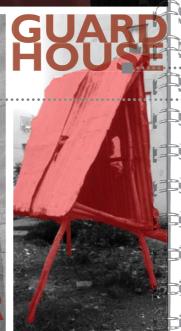
the street pattern is not well designed no landscpae furniture

Power house

- its function is confusing, lots of people do not even know what it is besides it is in the middle disturbing the common space and visual connection

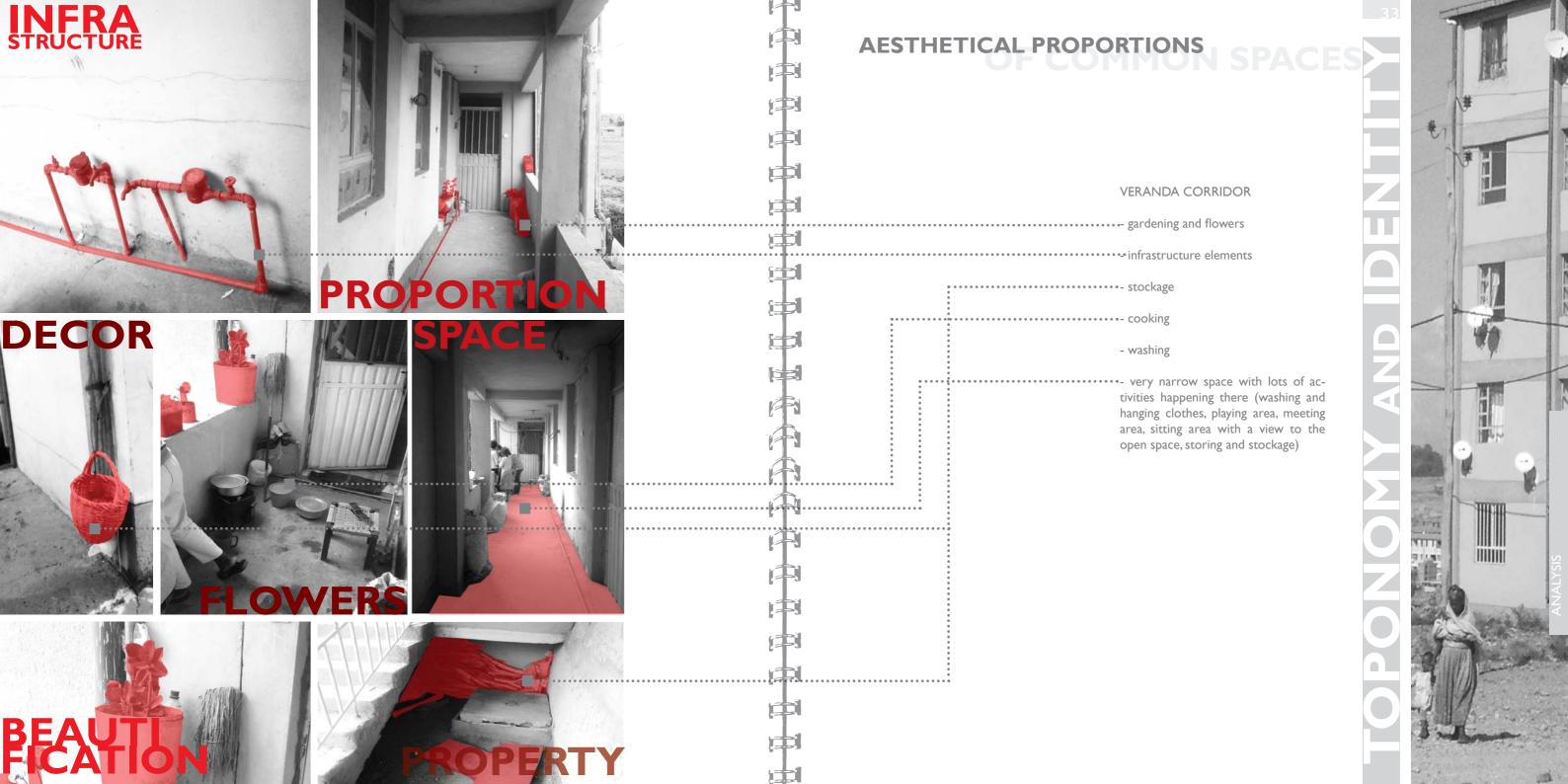


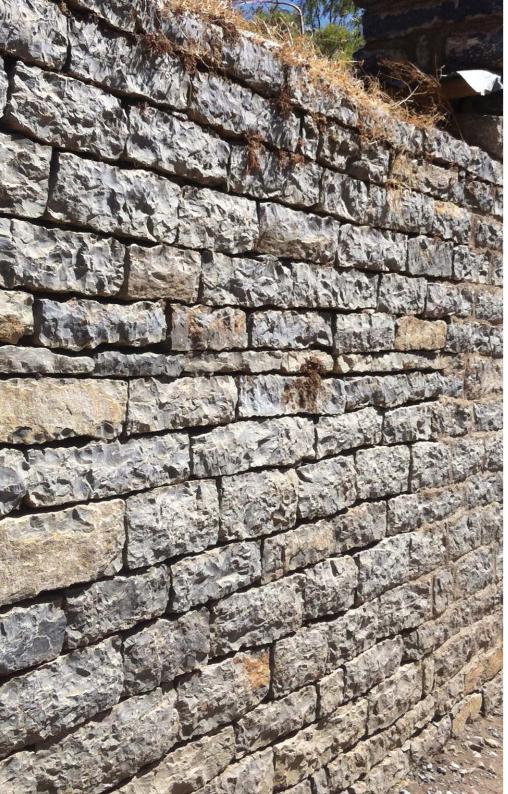


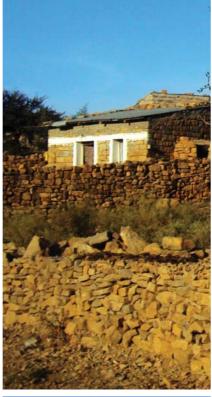












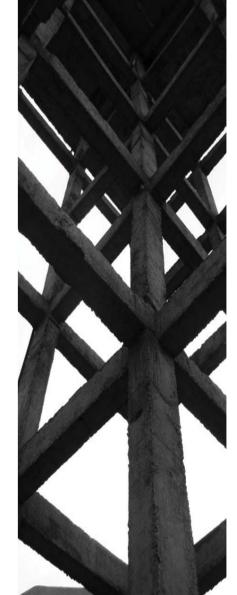


# COMPARISON AND TRADITION MATERIAL

Traditional courtyard houses are small in scale. All house are G+0 horizontal houses constructed by stone which is local material in Mekelle.

But the big condominiums that exist now in Mekelle are constructed with HCB which is not local and economic material. This shows us that the currently implemented big condominiums are less friendly to the context of the site.











The size and scale of a single condominium block is relatively bigger than the courtyard housing typology, which may provide a better transport to work from the condominium.

Condominium housing complexes have many more rooms available, allowing more variety and leasing options.

The majority of condominium housing blocks may include a variety of amenities, including common convenience stores, common slaghter rooms, and even small grocery stores located within the building itself.

Whereas in the courtyard housing type, we only find smaller housing units available. And most often they are horizontal structures.



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# COMPARISON AND TRADITION ORGANISATION



The organization of traditional courtyard housing is a bit more inclusive of the rooms around it. And it is emphasized towards the central common area.

Unlike traditional courtyard houses in Mekelle the big condominium housing projects are not organized in way they compliment the space between block. Most of the blocks are organized randomly with no basic principle of organization.



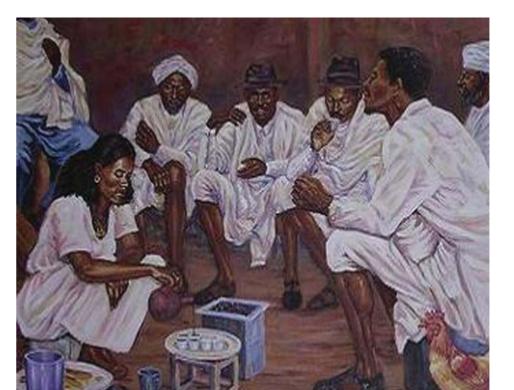


# COMPARISON AND TRADITION SOCIAL LIFE

### SOCIAL LIFE

It's very known that the Ethiopians have their own way of socializing with their neighbours. But, with the rise of structures like the condominium housing, these rich cultures of socializing with neighbours have changed the focus of the people to their private lives.

In the traditional courtyard housing the house are compacted and have common and mid space they share. This central common space gives a chance to spend times together and to have common activities, like having coffees together.









a guy living in the fourth floor have took his bicycle up to his floor, because he did not feel safe to park on the ground floor





# COMPARISON AND TRADITION SAFETY

Since people living in traditional Mekelle courtyard house are few in number everyone know each other which make the occupants to feel safe. An intruder can be identified very easily. No need for fencing within the compound unlike people living in big condominiums. Kids play on the courtyard that is found in the mid of the compound close to their houses.

But people living in big condominiums in Mekelle face safety problem. Since number of people living in one block is large in number with different ways of living and background. Therefore, people don't feel safe and try to create means of protection by constructing fence on their verandas and balconies As shown on pictures.



# COMPARISON AND TRADITION BELONGINGNESS



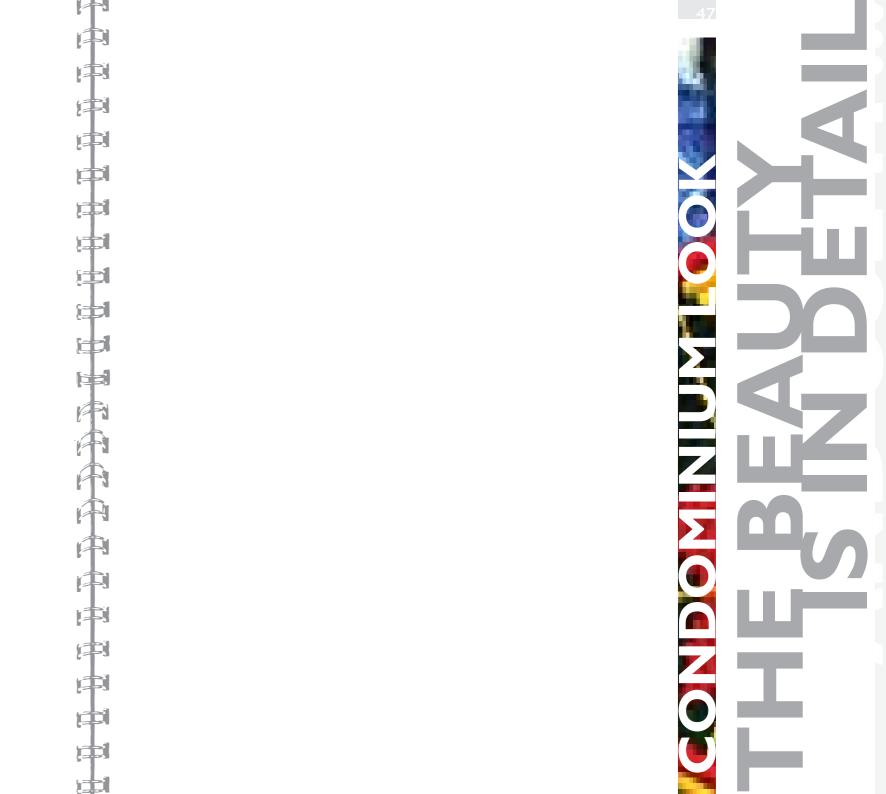




Perhaps, belongigness has a strong impact in the livability of any building structure.

People living in the traditional courtyard housing are more devoted to their common space and their lifes are divergent towards the central common area.

However this does not happen in the case of big condominium housings. Most of the residents have very private living styles and are less devoted to their common spaces.



# THE BEAUTY IS IN DETAILS UBSTANCE

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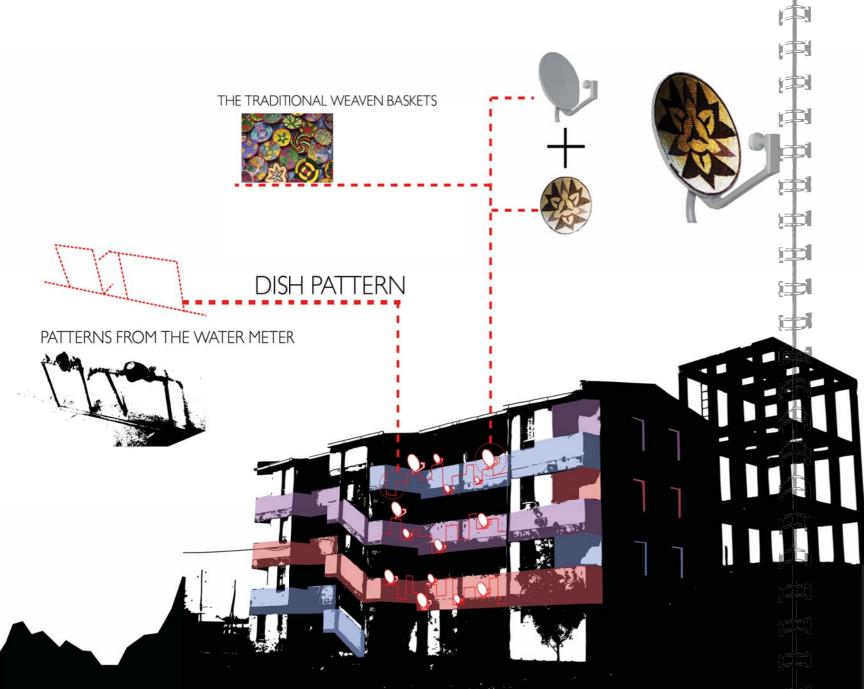
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# TIGRAYIAN SATTELITE DISH

This traditional crafts work is one of the main identities of ethiopians and espectially Tigreans. They are mainly used as interior decoration elements and have also additional purposes as an equipment for different activities.

The appearance, color and design of this crafts work is very amazing and unique. And this project have integrated this element together with the satellite dishes as an identity giving element to the whole condominium building and adding a special character to its look.



The color is another element of the look. The color has been used as an element displaying the life of the people in the condominium which has different way of life and background. Therefore painting in different colors but in harmonized one will create this feeling without losing its totality

# NO BALCONY? DEAD FACADE? FACADE

# USING THE SPACE BETWEEN BUILDING

Most of the buildings in the site are in close organisation with each other with no function shared in common even the open space...

The intention of this design is to provide space for hanging clothes on the rope in between buildings...

### A PLACETO HANG (DRY) CLOTHES:

A place to hang clothes for drying is one of the immediate cases of the site. There is also a dead back wall in almost all the condominium blocks and this gave inspiration of using the back wall as a main place for hanging clothes. By using a rail of bamboo or any other solid material like wood or metal tubes coming out from the room in the back wall, there is a place to hang and dry clothes.



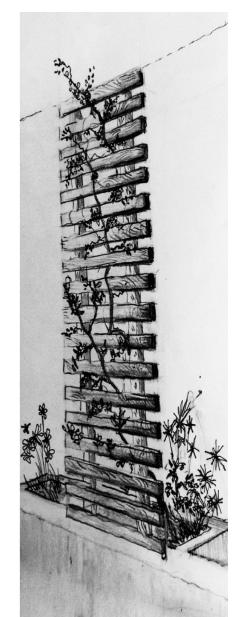




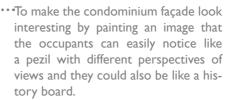
# VERTICAL GARDENS IN THE AIR

Currently the existing condominium houses do not have a good look due to the random and unpleasing pattern of the satellite dishes and the other functions like hanging clothes on the front facade. As well this design has put a grid of using a different place for arranging the satellite dishes and introduction of greeneries.

Greeneries: the main concept behind the greeneries was introcuction of a greenery element with community participation. Here the design have introcuced horizontal wood shutters as a main element of greenery







And by painting the plumbing interesting painting so that it won't look like it was a mistake left behind and so that it will fit well with the façade.....





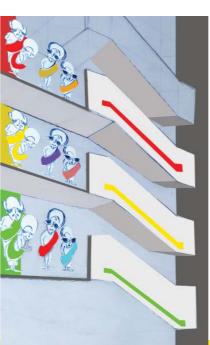


### **SOCIAL STAIRS**

# DRIENTATION

Stairs are part of a building where users access pass most often. This fact turns them into important places of attention to create social life.

Here, the stairs are used as a media of expressing the unity with in diversity of the people living in the condominiums.





And in every floor there is an invitation text for a coffee or tea in every floors so that people may drop by and have some.

This will retain their social lifes they missed in the places before they moved in to the condominium.

# GUARD HOUSE OR BENCH?

The guard house happens to be a triangular structure with an alien look to the whole condominium site.

As a result the guard house is used as part of the landscape. With a little modification to its shape and material, this was used as an element of urban furniture.

a) In relation to material: we all know that the GIS material is not comfortable to seat and aesthetically unpleasant.

But by using bamboo as a main material, this element can be used as a bench.

b) In relation to construction system: By making it flexible and operable, the guard house is used as a seating bench in the day and a sleeping space for the guard.











# PLAYGROUND IN STOREYS ER TOWER

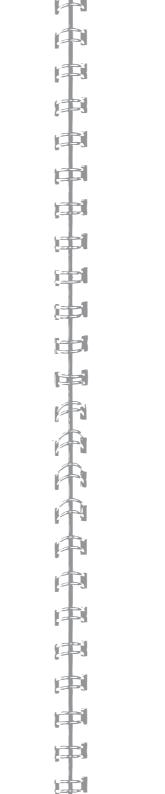
The first thing you notice when you enter a condominium site is a huge structure which is supposed to hold water tanks. But it would have been better if it could have been integrated with the building blocks of the condominium

The people are very passionate in having their own gardens, which gives an inspiration of transforming the water tank as a vertical garden.

The design has provided a playground for the kids on the ground level of the tower. This makes it very appropriate because it is easily applicable and can be used as a land mark for the site.







**M** 

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# LIFE ON THE LEAS JECT SUBSTANCE

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### CHURCH

A church located near the site,across the street, helps christans perform their religoius



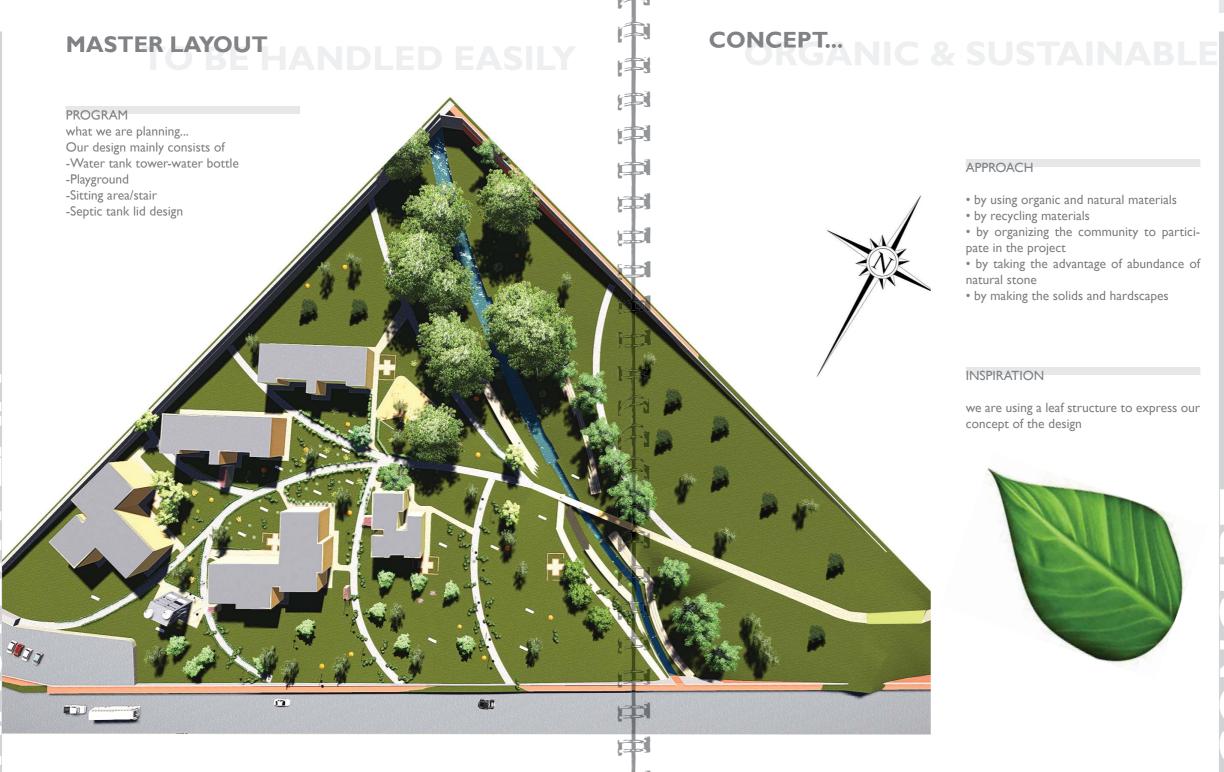






site, only a river which over flows during the rainy season is loacted at the eastern

part of the site.



### APPROACH

- by using organic and natural materials
- by recycling materials
- · by organizing the community to participate in the project
- by taking the advantage of abundance of natural stone
- by making the solids and hardscapes

### INSPIRATION

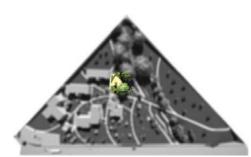
we are using a leaf structure to express our concept of the design





## THE PLAYGROUND PASSING ON RECYCLING





**CURRENT STATUS** 

As we have mentioned earlier there are lots of children living in this condomniums. These kids currently play outside, close to thier blocks.

### INSIDE

This blocks have their own names and people from the same block hang out together, rather than hanging out with someone from another block.

### SOLUTION

We have set up small playgrounds for every block and a bigger one for all near the park.



having fun

## SOLUTION

teaching about reusing resources

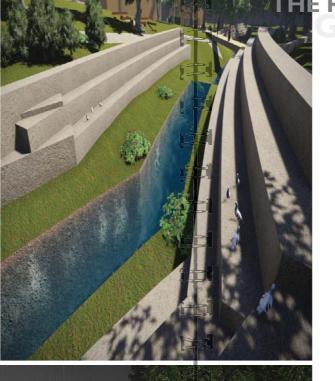
Since there are many children on the site we came up with the idea, sticking the water bottles on the tall structure and create some kind of sculpture, why so high you ask, so that every one can see you can reuse things insted of throwing them away.



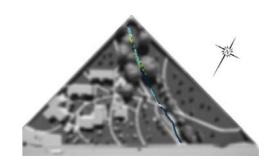




# THE RIVER GOING WITH THE FLOW







### CURRENT

The river flows best in the summer, but other times it doesn't flow well. So when it does flow it is a great spot for relaxation, i.e. the calming effect of the passing water to whom ever hears it

### OWNERSHIP

Even though the river flows through the site, it doesn't mean it only belongs to the site users. So using the river as a boundery we gave half to the site where the other half would be open to the public.

### THE DESIGN

We have designed sitting places that go with the countour out of concrete, so if it floods the materials would not get damaged.





## WATER BOTTLE SCULPTURE LED EASILY

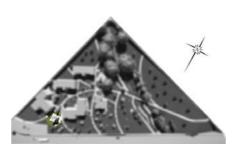
## WATER BOTTLE SCULPTURE



## WATER BOTTLE SCULPTURE

Passing on recycling

When we enter the site we can see a water tower, which has the same height as the buildings, which had strucural element and was open,just a skelton....



### INSIDE

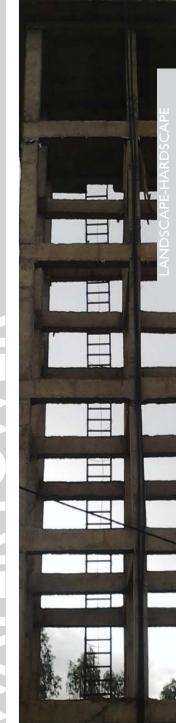
We noticed a lot of plastic bottles laying around and no one is doing anything about

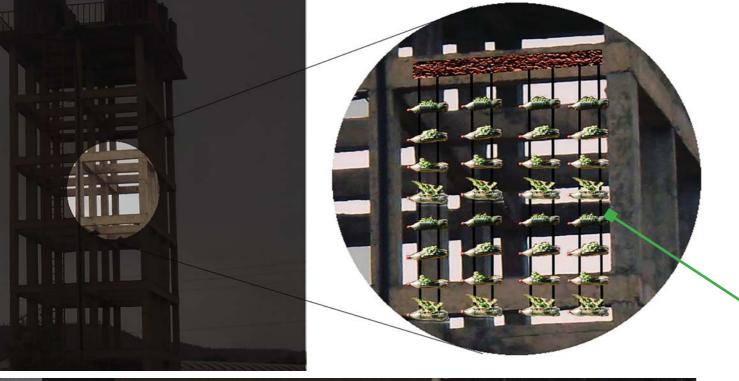
### SOLUTION

teaching about reusing resources

Since there are many children on the site we came up with the idea, sticking the water bottles on the tall strucure and create some kind of sculpture, why so high you ask, so that every one can see you can reuse things instead of throwing them away.







## TRANSFORMATION DETAILS

Project I – using the plastic bottles

- •Making vertical gardens by the use of recycled plastic bottles mainly of the water tower
- •By putting this plastic bottles on the water tower we can say
  - ☐ Clean the site without a penny of outcome
- ☐ There is a participation of the community for instance a person per block might drink one bottle of water per day. If that person puts the bottle in the given pattern, it will be a beautiful hanging garden in a short period of time.
- roject 2 coble stone hardscapes

On master plan of kebele 17 condominium sites, circulations makes a structure of leafs food transportation system. Depicting this makes the circulation system easier and friendly for the community and an organic placement of condominium blocks.

Since our concept is sustainability and organic, we use environmental friendly materials such as recycled materials and stone.

Project 3 – green septic tanks

Generally, this analysis design explores the use of managing common spaces for specific or general statues of individuals. And designing these common spaces means managing of day to day life of a person.

In this research it has been tried to analyze how they live now and how it would be better & suitable aesthetically as well as meet the required function.

Although managing day to day life of approximately 120 families is difficult, in this design we tried to come up the idea of friendly, sustainable and organic common spaces for the community to keep the Ethiopian tradition of living together while having an identity of neighborhood that they are proud they belong there.

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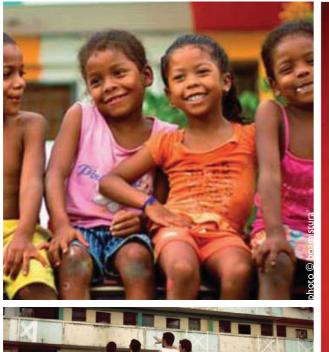
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the different views of each member.

Boa Mistura highlights a distinction between community based projects and street art for the sake of decoration or self-appropriating places. This work and many of their previous projects serve as agents for communities to trace memories, create narratives and involve a collective identity that serves to beautify their public space. The debate whether street art is done for the public or for the self- interested artist is becoming more widely discussed as many artists feel inclined to give back to the communities they temporarily work in. This might be delicate mebodiement of participatory inclination of sanctioned street art and community engagement. Community based projects are another vehicle for artists to push their perspectives and, at times, their visual tendencies and possibly propel more discussions that can give us varied answers to "what the hell are we doing with these large-scale mu-

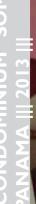
rals?"

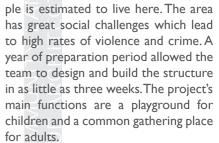


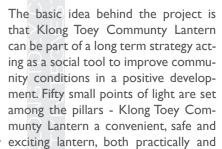












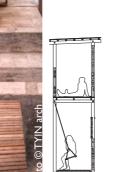


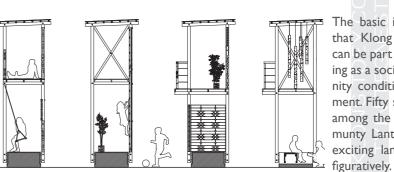










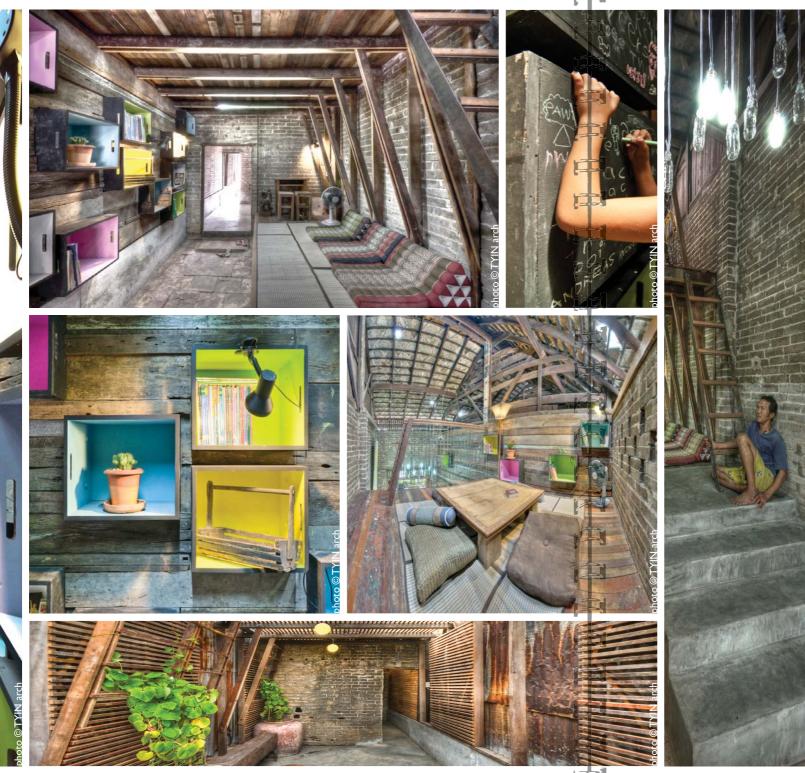






For this project to be successful it was important to involve the inhabitants actively throughout the whole process, from inception to completion. Initially we mapped the needs within the community. It wasn't always easy getting everyone involved, especially the adults. However when the project became more tangible this completely changed. We soon had a regular group that worked with us every day and who began to develop an attachment to the library, a sense of achievement and pride. It was important for us to use local and reused materials, which were already available to the community.

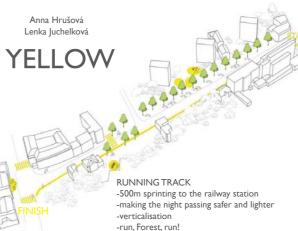
The refurbishment was a demonstration of what can be achieved by the inhabitants themselves, through own initiative, using local inexpensive materials and their own knowledge.





TYIN tegnestue, Old Market Library drawing section scale 1:100 paper A4

300m
400m
world record is 43,18s!
300m
u r almost in the half!
200m
is it leaving in 3minutes?
u can't make it!
100m
world record is 9,58s
u can make it in one minute

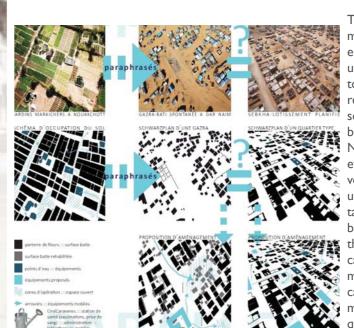


The 24hour long student workshop in Liberec in the Czech republic was organised with a purpose of solving the issue of empty and abandoned avenue connecting the downtown with excentric railway station. The avenue itself suffers from lack of identity, undefinied form and poor interest of people.

Two young architects solved the problem with painted pedestrian lane, which would give an original identity to the path which is necessirily taken by people in rush not to miss their train. To enhance the primary use of the avenue, the painted lane symbolises the running track with distance signs informing about intersting facts from the world of athletism or chearing the people not to miss their train.

The design is completed with several yellow spots attracting people to stop on their way from the railway station to the city centre - a view point, a playground or a yellow central meeting point...

The Nouakchott city faces environmental and social problems of different types and scales. The population urgently wants the solution appliable tomorrow, everybody searches for the references abroad, good examples of solutions of similar problems. And! The best reference is in heart of the city Nouakchott. In the botanical and vegetable gardens. In the gardens where vegetable beds are organised like an urban tissue - with parcels and important infrastructure (wells and water bassins). And the most important is the presence of watering cans that became an inspiration for mobile equipment units, p. ex. mobile library, cinema caravane, health care truck, mobile administration etc.v coming into "fragile quarters" regularly...





THE MORE COMPLICATED IT IS,
THE MORE MISTAKES ARE MADE.

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