

### **Proyecto Escape**

Proyecto Escape is a non-profit association in Altos de Cazucá, one of the socially weaker districts in the south of the Colombian capital. Unfortunately, due to insufficient financial means, many families there still live in very difficult life situations and have to struggle with problems like crime, drugs and gang wars.

With their work, Proyecto Escape actively deals with these problems in order to promote development of the social environment in Altos del Pino and thus to achieve progress and an improvement of the living conditions of the people living in this district. Proyecto Escape in alliance with other organizations has organized various Workshops in Architecture and Emerging Urbanism, focusing on the exchange of knowledge between the inhabitants of the neighborhood, students and professionals around the construction of different community projects through participatory processes.



# "We're the forgotten victims of this war"

- Rosa Fierro



IDPs - victims of Colombia's long-running armed conflict, that ended in November 2016 - had to leave their mostly rural homes due to ongoing violence, threats to life or as a result of war strategies in the last 50 years. According to the city's Regional Office for Victims (CRAV), Soacha is one of Colombia's top destinations for displaced people. The informal settlements are illegal but the authorities are powerless to stop them as the displaced have nowhere else to go.

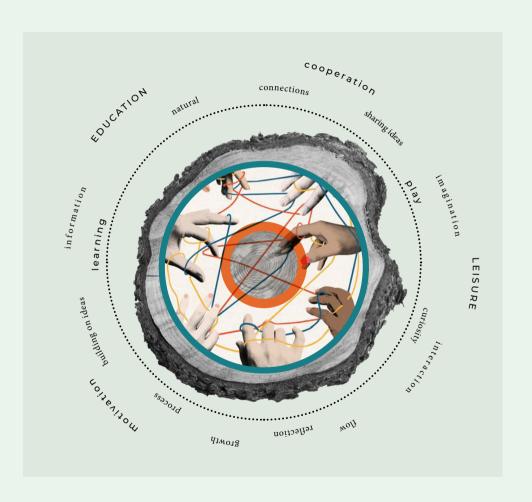


Soacha is also one of the municipalities with the highest number of Venezuelan migrants in proportion to its size. During the political crisis almost 1,5 million Venezuelans immigrated to Colombia. Many of them leaving their family behind because of high transport costs. Most of the Venezuelans that are arriving are young adults who are looking for jobs to provide their family back home. The lack of a nationally valid document that proves their identity complicates the process of finding work.



"There is nothing back home for my family"

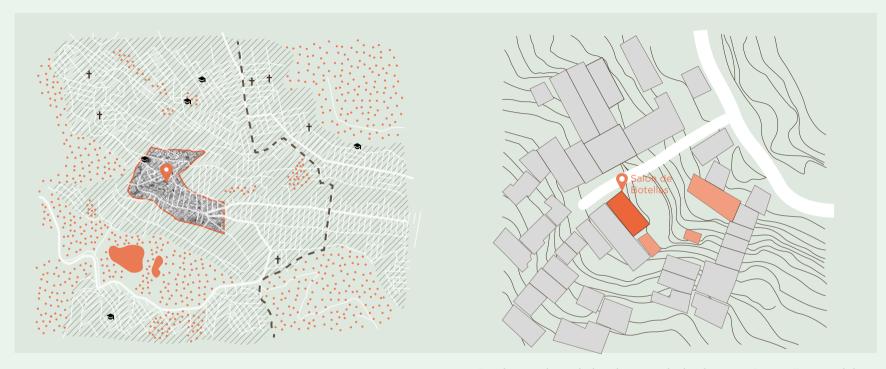
– Eduard Sanche

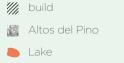


## Interplay of education and leisure

Altos del Pino is a neighbourhood with multiple environmental, social and economic issues, that put the high and dense population in a situation of constant vulnerability. The high poverty and the deficit of public space in the sector has a negative impact on the education of the residents which prevents the correct development of the community.

In my thesis the main objective is to collectively design and build an auditorium for the community center that will allow the Proyecto Escape Foundation and the community of Altos del Pino to promote and carry out various activities around culture and education in an adequate space.

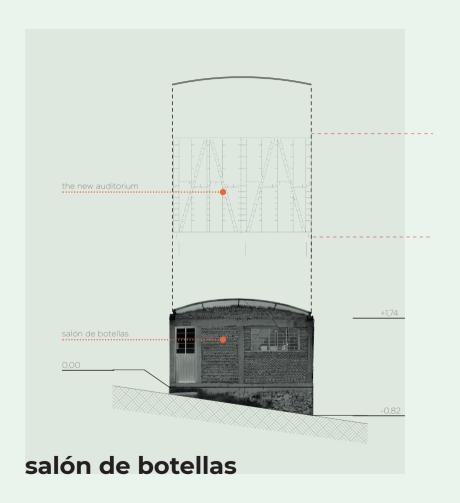




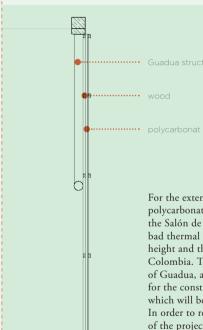
**⇒** Schools



In order to implement higher education and cultural activities, Proyecto Escape needed additional floor space. Therefore, it was decided to extend the existing community room "Salón de Botellas", which is part of the configuration that forms the Community Center of Cazucá. The room was built in 2012 by the community, using recycled plastic bottles. Around the area of the Community Center, we find various educational, cultural and religious institutions, which are using the space to promote and carry out workshops and activities for the community members.



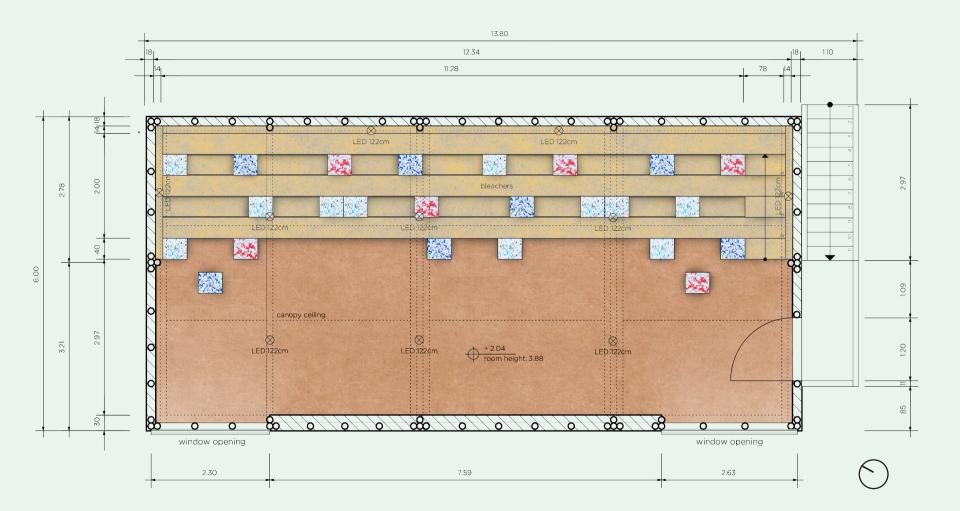
#### the architect's proposal



For the extension, the existing roof out of polycarbonat will be reused. In the past, the Salón de Botellas suffered under very bad thermal comfort, due to the low ceiling height and the extreme climate conditions in Colombia. Therefore, a higher structure out of Guadua, an american bamboo, was chosen for the construction of the new auditorium, which will be covered in polycarbonat panels. In order to reduce the environmental footprint of the project, I focused on using sustainable and regional resources that allow for a simple execution of the project.

facade section

scale 1:20



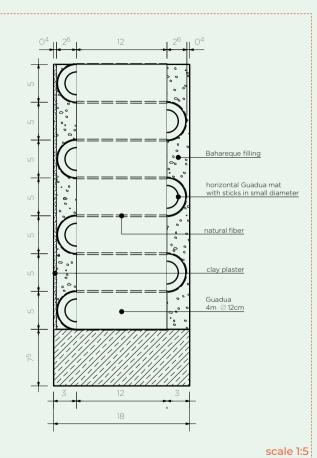


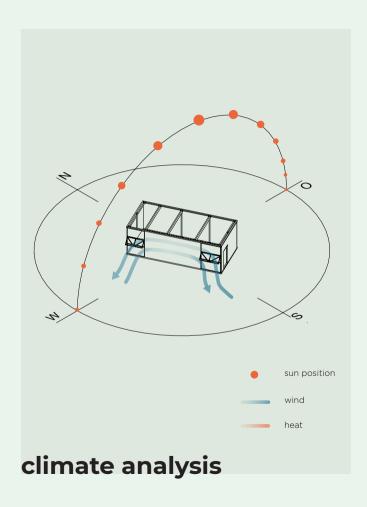


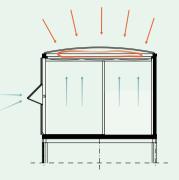
Traditional bahareque generally consists of a frame of wood and/or bamboo, covered in strips of split or open bamboo and finally plastered in earth, sometimes with straw added for strength.

The material's thermal qualities are made to withstand Colombia's humid, rainy climate. In fact, a wall of 25 cm is able to absorb heat to warm the interior. Furthermore, the earth itself is a natural air filter, as microscopic pores in the soil allow the floor and walls to breathe.

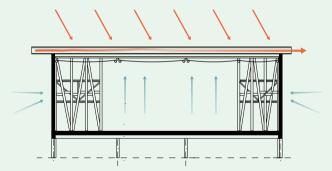
The construction with bahareque also has economic advantages as it can be easily remodeled or repaired.







For the climate control of the auditorium a natural air cooling system is needed. The window openings are located to the wind direction, so that a refreshing air circulation can take place in the room. The inclined window opening protects the room from strong wind waves and tends to direct the air upwards.

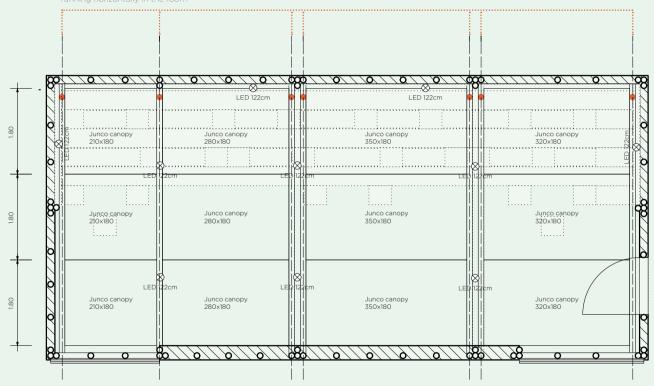


As the existing ceiling made out of polycarbonat is going to be reused, the plastic will save and recreate a lot of heat. Therefore, the installation of a canopy ceiling out of junco will keep the heat above. Nevertheless, a gap in between the ceiling and the beams will allow the hot air to exit the building.

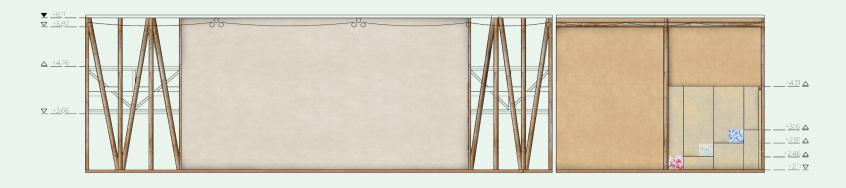


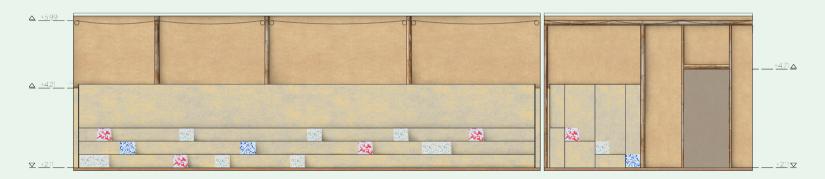
Junco is a plant cultivated in the lake "Lago de Tota", approximately 200 km northwest of Bogotá. The lake suffers from the plant's overpopulation which is why the residents around the area are inventing alternative forms of using the plant. For a canapoy ceiling, Junco has perfect characteristics. It does not need to be treated with insulating products, because its main quality is impermeability, it also protects from solar rays, keeps the interior warm at night and cool during the day. Getting up to 10°C of difference with respect to the outside.

The Junco weavings are tied to the gudua construction

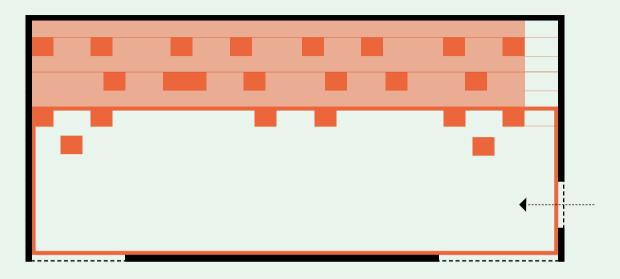


## ceiling plan





## elevation





Recreational facilities in the form of a cinema



Assembly possibility for members of the community



Teaching space for schools + cultural or religious institutions

### **CONCEPT**

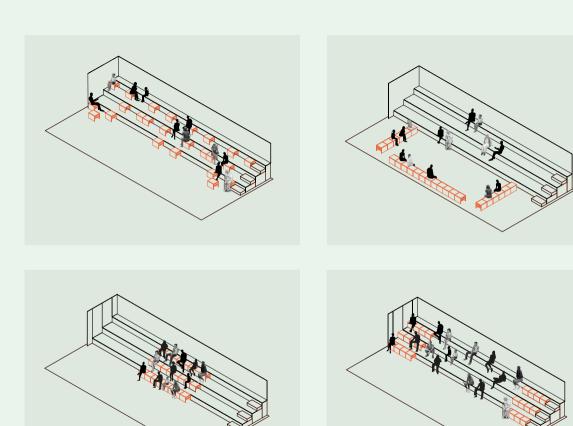
The concept for the auditorium is based on the balance between defined and free space. With additional mobile stools the auditorium provides an engagement in its usage. The variations of the spatial concept include a classroom for schools, a space for cultural education, a space where different celebrations can be held, a community cinema and a room for gatherings.

The spatial arrangements were customized for the community's needs and wishes and it's flexibility reflects the diversity of the community.

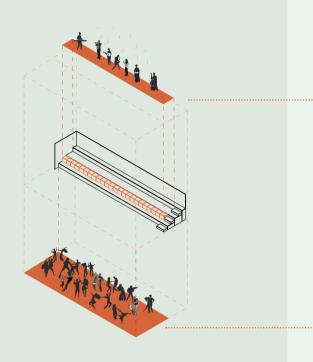
defined space in shape of bleachers with space for 66 people sitting

24 mobile stool

> 40 qm free space



spatial arrangement



When the max. amount of free space in needed the bleachers can convert into a stage.

----- 1,20 x 11,28m

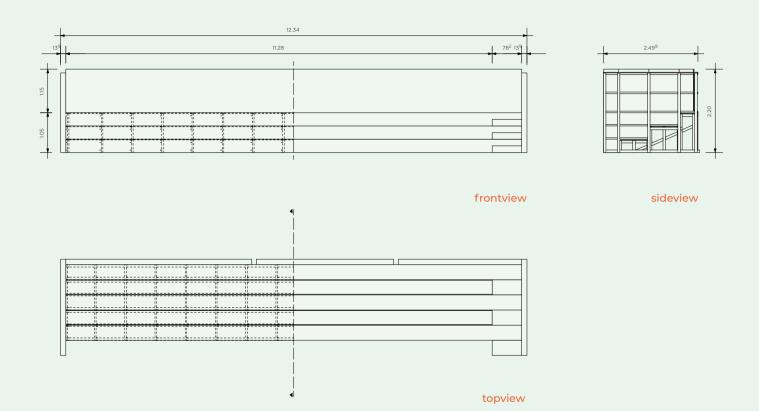
Another conceptational aspect for the auditorium was the impotance of socialising within the community. The integration is a process of strengthening and building intercultural citizenship that aims to create alternative forms of sociability that are participatory and based on solidarity.

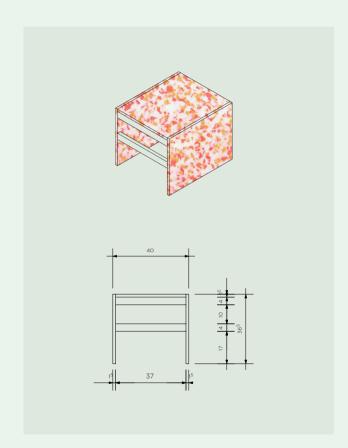
>40 m<sup>2</sup> max. free space

0,5 m<sup>2</sup> per person

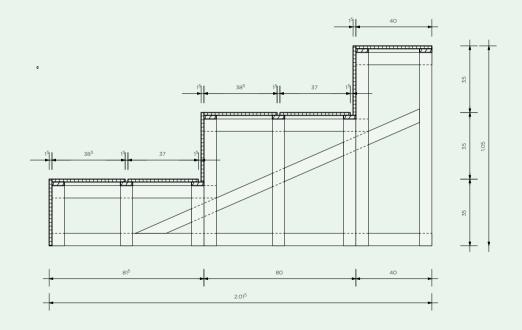
80 PEOPLE

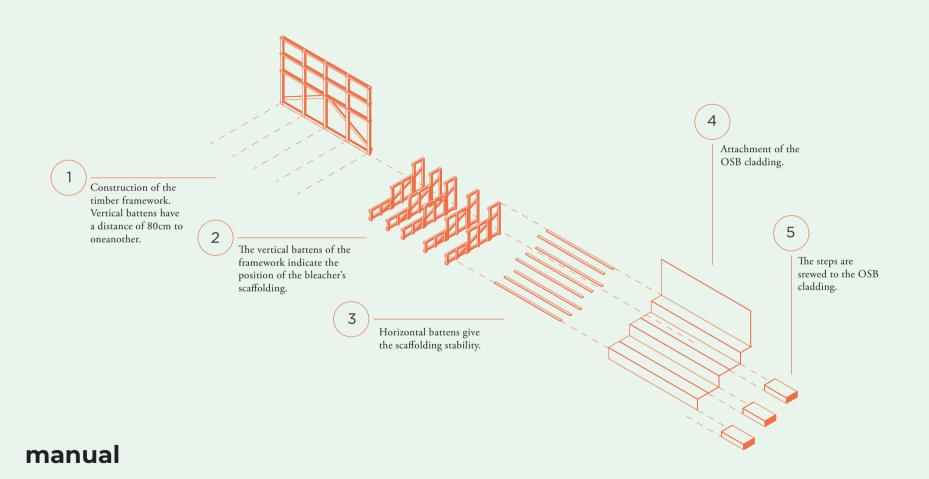


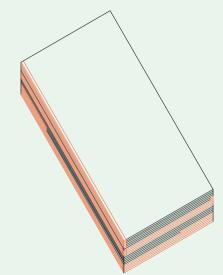




The stool will be out of recycled plastic and reflects the colorful neighborhood of Altos del Pino.

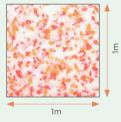






19 OSB Panels • 2440 x 1220 x 15 mm

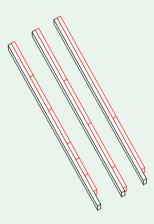
The bleachers and the wall panels will be cut out of 19 OSB Panels. OSB is used as it is a simple way to reduce the costs for the project. The choice of material was made taking into account durability, quality and economy.





•18 x 1x1m<sup>2</sup>

The stools will made out of shredded plastic that is compressed into  $1x1m^2$  sheets. As 3 sheets produces 4 stools, a total of 18 sheets will be needed for the current planning of 24 stools for the auditorio. The recycling of the plastic, the production of the sheets as well as the building of the stool itself will be executed through workshops by Projecto Escape where the community is invited to.



#### Timber structure

· 48 x 3200x41x65 mm

· 40 x 3200x19x65 mm

The construction was planned with timber in standard dimensions in order to save unnecessary costs on custom-made products.

## material analysis



#### PRECIOUS PLASTIC

The Proyecto Escape Foundation has set it's focus on sustainability. In the future they want to engage in the precious plastic community and create a workspace for the neighborhood. It can offer art workshops for schools with the aim to educate the community about plastic and it's enviormental consequenses. The collecting and recycling of plastic also encourages the resident's participation in the project as it did in the past when the "Salón de Botellas" was built.



#### **BUILDING WITH EARTH**

Bahareque is a traditional way of building in Colombia. With the cooperation of the Observatorio Urbano + Habitat de la Universidad de La Salle there is a possibility of offering workshops for students on how to build with earth. As the Community members of Altos del Pino have a lot of knowledge about that topic, students and professionals can exchange their knowledge about Bioarchitecture and practice experience through the workshop.



#### WEAVING WITH JUNCO

Many reseidents of Altos del Pino migrated from districts of colombia where weaving techniques are taught and passed down in families for decades. By offering workshops to the community, members have the chance to parcitipate in the project by introducing innovation and new design to their neighborhood.

## future workshops