

A GROWING SPACE

Growing means for us to create a place not in a day but step by step. We are creating a place where ideas and experienced and grow. As well as the plants and people.

How did the Scandinavian school of design affect your approach in sustainable product development? When did you start thinking about sustainability?

Comparing another topic of sustainability wasn't so exposed as it is now I guess, but a major project that we did in Finland was basically all about sustainability. That was my first serious meeting with that topic.

How and when did you start to develop your prototype Biomass briquette stove?

The project started in Finland. We did a research for six months before we went to Malawi. If you want to know more how it started, it was the WWF (worldwide fund for nature) initiated the project. They had a biology department, who was based in Malawi and were studying the Cichlid, this native species of fish that only live there and were endangered. They initiated the school of design in Finland, to come up with a successful stove that would burn these biomass briquettes better. The initial problem was biological. It happened due to erosion and the erosion happened due to cutting down trees for firewood, which was in that natural park illegal. So, the erosion was so strong it affected the river and then fish. So, they heard about an idea of biomass briquettes as an alternative instead of using wood. So, they could make these briquettes themselves and could also cook with them. So we made some prototypes and worked with people a lot, and found out that our research from somewhere else was useless, comparing to what you learn when you are in the field. So that was our biggest gain of going down there.

That was my second question, when you work from a distance, you don't have as much touch of what is happening down there. So that is the most basic form of sustainability. And most of it you realised it there, when you were in the field?

Yes, it was a huge issue. I started to develop the idea how to do it from the distance. I mean you can travel around the world and teach people how to make stoves, but on one point you use a lot of energy and effort for a very little impact. So, we wanted to take advantage of the internet. We put solution online as a very basic idea, that people could adjust to their own environment and materials that they had on disposal and do it their own way. It would become an abstract idea of the stove solution but the practical output would be different in every local area. This way you put the seeds around the world, and they do the business by their own.

So, you created the core of the project, and they could adapt it to their own?

Yes, I wanted to simplify the engineering idea of the stove. We did many tests on what would be the most universal dimensions that people could use with different briquette material and stove materials. I came up with this particular form of this stove, the rocket, which was this traditional way how to burn firewood. I put this online, just as a principle of an idea, and it would grow in time.

In which stage is this project now?

I got some good feedback from Philippines, we collaborated a lot with this guy, Jet Quinto, and he taught children how to make it. And then a few others in Chad and you can see there.

What are you working on now and what is interesting about it?

Basically, I do some experiments in the new studio we have in Ljubljana. Mostly with the material. So, I try different mixtures with clay. And I'm trying to find out more about it, how it would behave and break. I don't try to push it too hard to promote the idea, because the people who need it the most cannot be contacted.

The responsibilities for a change as much to the designer also to its users do you take some moral responsibility for the product you design?

I don't like to talk about sustainability as the initiative point of the project. I think it should be there by default. It should be everywhere. We shouldn't think about sustainability of something that drags the project, but it should just be there. It's an obvious thing. It happened in my Canadian experience a lot, in my master studies, when I was in Vancouver. It was a lot of talking about sustainability. And I was really bothered by it, because it was too much greenwashing in a way. But in my current work it is definitely a major theme, even deeper with just materials and processes. I try to think also on what the long-term consequences. Clay is a really demanding material I think. And if you want to do a lot of experiments, it's a much larger theme. And it just keeps following me, I don't know why. I don't like to romanticise clay, I mean it's nice but it not a driving force. For me it's more this mysterious material. every day you work with it, and you get something different out of it. Mainly I work with clay and wood. It attracted to me because its free to use and it is everywhere. It could be plastic waste as well. I don't like that some projects, are made of some raw, fresh, virgin materials. And this is rooted in sustainability thinking as well.

AN INTERVIEW WITH A STAKEHOLDER

Rok Oblak, sustainability focused industrial designer

Adaptive design – an ideology that Rok Oblak has been following since his early days of studies and career in industrial design.

With his distinguishing academic background, from the Academy of Fine Arts in Ljubljana, to University of Art and Design in Helsinki and Emily Carr University of Art and Design in Vancouver, Canada, he has been able to create a product, that no matter the natural circumstances is adaptable, functional and made from invasive plants materials. The Biomass Briquette Stove is made for people in developing countries, where the scarcity of options and products, has led to destruction of eco systems for the purpose of survival. The product is a self explanatory sustainability and adaptiveness. After all the transformations and years, Rok is still researching new ways to redevelop it, while working as a product manager for major companies such as Alpina, UX/UI designer and free lancer.

While you are working with companies that are not sustainable, when it comes to decision making part, is there an inclination of taking into consideration the factors of the whole life cycle analysis, or just the business sustainability ones?

Well, currently I only collaborate with companies that are very sustainability driven by itself. So there is no problems around it. But before my first job was product management designing ski boots. Ski boots take plastic, textile, metals, so many materials and so much processing work. And it was a very market driven thing that I did. And it was very hard to survive, because all this green and sustainable theme was market driven. We didn't do sustainability there to be sustainable, but to be interested on the market. Which is also ok. If market drives you in a good direction, also marketing is good.

AN INTERVIEW WITH A STAKEHOLDER

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industrial designer

How can we reuse different materials?

It depends on the materials you are given, but you can do a lot of stuff out of different materials.

Our location is an abandoned construction site with stones and wood there. What is the best way of reusing these materials?

You can use the stones to build a wall with, for example if you put them in a steel net or mix them with concrete. You can also do a lot of stuff out of wood and it depends on what type of wood and which parts are there. If you have logs or branches you can make different constructions out of them. If you have branches which are a little bit harder to work with, you have to tie them together.

If we were to build from wood how do we modify it?

When you're building from wood or any other material you have to make it look like new, because no one wants to sit on a rotten wood. That is why you need to sand and clean the surface and maybe paint it. If the wood is not in good condition you can fix it with plaster. You can also reuse old palettes or parts of them for the floor or something similar.

What are some other materials that are easily to find and to build with them quickly?

It is possible to combine materials that you already have like earth and mix it with cement to make it stronger. You can also make walls out of straw, clay and water. You can find walls like that in Slovenia in Panonska nižina. You can also use old tires and for example fill them with concrete. There is a special type of concrete called hobbyconcrete which is easy to use and dries quickly.

What would you suggest to be built and is there something we should be aware of while designing it?

Your design should be as simple as possible for example just a roof and terrace. People tend to use the space if there is one focal point that attracts them there. If there is one effective thing, that's the best solution. The space doesn't need complicated structures or too much of everything to be attractive. There was a project where they made a simple roof out of bamboo beams, wires and concrete pipes. The pipes were filled with concrete and were used for protection and stability of the beams, which were connected with wires and the roof was placed on top of that.

AN INTERVIEW WITH A STAKEHOLDER

Nina Vidič, reused construction material explorers

Nina graduated on Faculty of Architecture in Ljubljana in 2011 and got master's degree on Bartlett School of Architecture in London in 2013.

Nina is a part of Mismo kolektiv and before she returned to Slovenia, she was staying two years in Chile. There she was a part of a studio Elemental, under the guidance of architect Alejandro Aravena. After that she cooperated for a year with Mathias Zegers to design buildings with an emphasis on unique details and then half a year with collective Al Borde creating participatory projects in Ecuador.

Pozdravljeni,
Smo študentke arhitekture, in sodelujemo v delavnici A Hidden Place. Projekt se odvija z namenom, da bi oživelili že 20 let zapuščeno lokacijo, gradbeno jamo, pri Bežigraskih dvorih. Lokacijo želimo ponovno odpreti, in ustvariti prostor, prijazen bodočim uporabnikom.

1 Ali se vam zdi, da ste med seboj povezani kot skupnost?

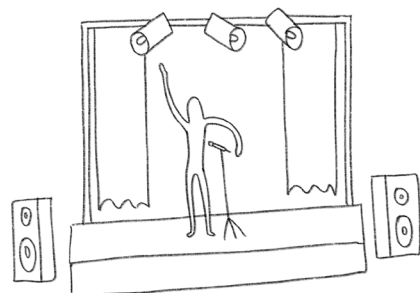
- a da
- b ne
- c ostalo:

2 Kakšne prostore za druženje pogrešate v okolici?

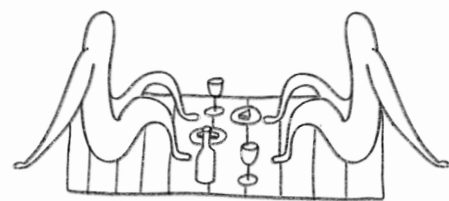
3 Kakšne vrste druženja so vam ljubša?



a druženje ob kavi



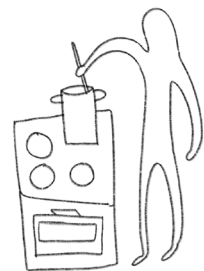
b druženje na koncertu



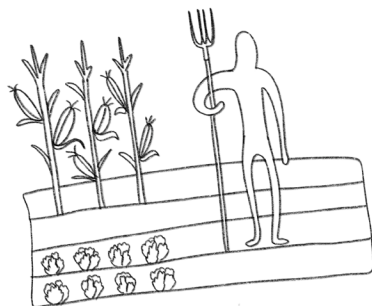
c druženje na pikniku

d ostalo:

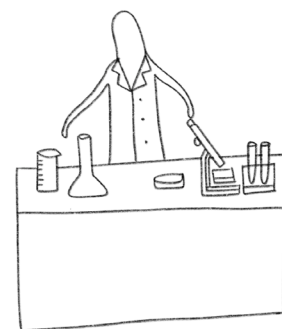
4 Kakšne dejavnosti bi se vam zdele zanimive/ bi jih želeli na lokaciji?



a kuharske delavnice

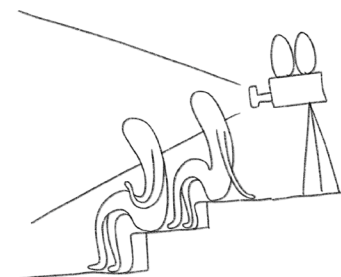


c vrtnarjenje

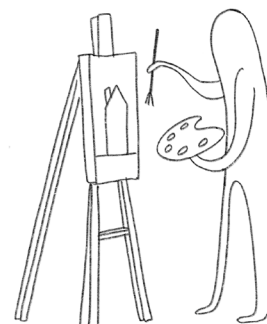


e laboratoriji

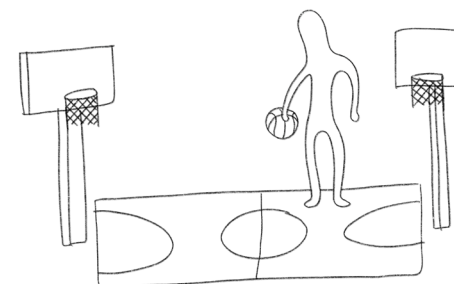
g ostalo:



b kino na prostem



d ustvarjalne delavnice



f športne dejavnosti (joga, vadba, skupinski športi)

LOCAL USERS SURVEY (CONCEPT)

Local people

Because local people are of all ages, we decided to take a neutral approach with drawings and illustrations of the questions. Our survey is possible to be handed without physical contact so it is safe in this situation.

DEFINING THE LOCATION FROM NEARBY BUILDINGS



- Buildings, that shape the space
- Buildings, that shape the space most clearly
- Buildings, that are further from the area, but still influence the space



ACCESS TO SPACE



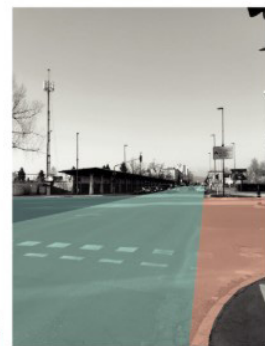
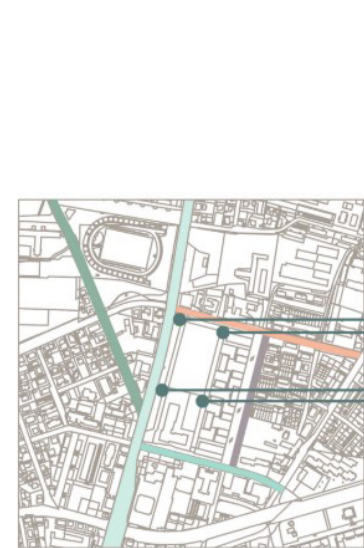
- Kržičeva ulica
- Topniška ulica
- Vodovodna cesta
- Dunajska cesta
- Peričeva ulica
- Samova ulica



THE PROCESS

design, thinking, ideas, iterations

First of all we started to think about the problems and the benefits of the site in Bežigrad. Bežigrad has a potential to become a young and hip area due to its close location between many faculties of the University of Ljubljana. We were thinking to create a place for the neighbourhood, so everyone can join and get a look behind the curtain of the project run by Trajna/Prostoroz and others.



Entrance from Topniška ulica



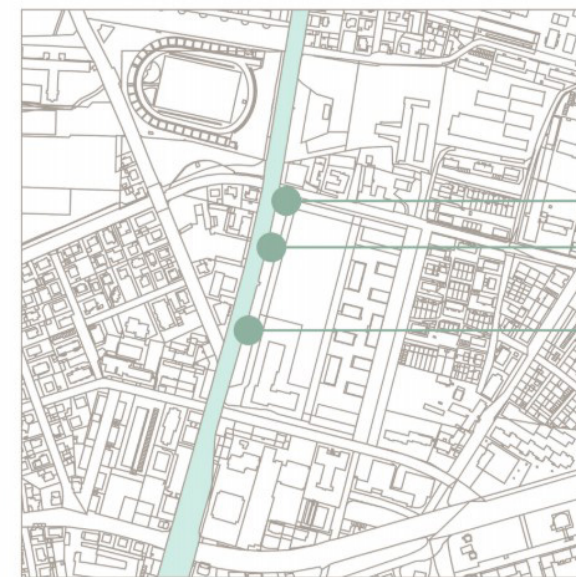
Entrance from residential complex Bežigradski Dvor



Entrance from Dunajska cesta



ORIENTATION POINTS
VIEW TO THE ALPS FROM DUNAJSKA
CESTA - north
PLEČNIK STADION - west
VIEW TO LJUBLJANA NORTH GATE FROM
DUNAJSKA / south

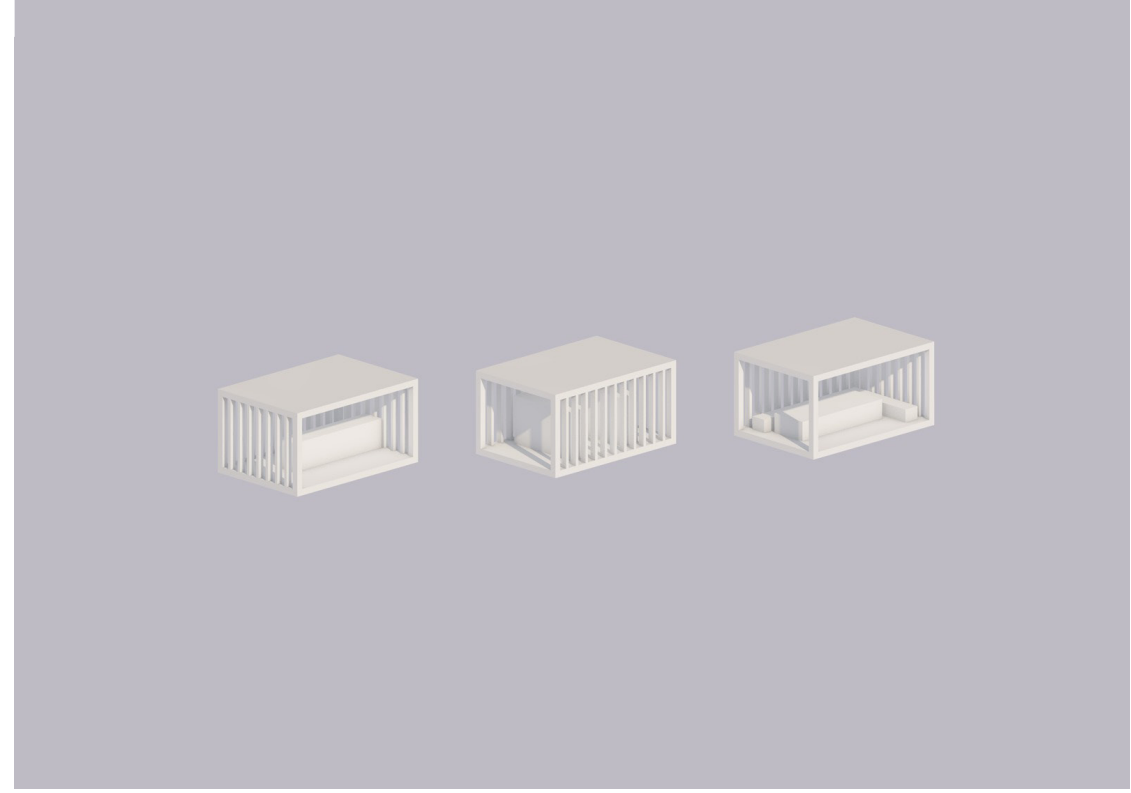
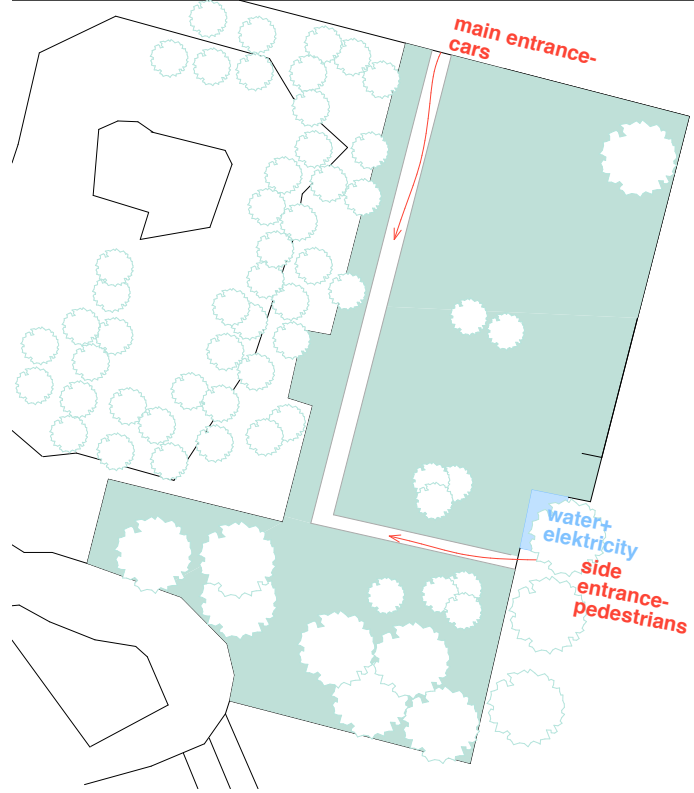
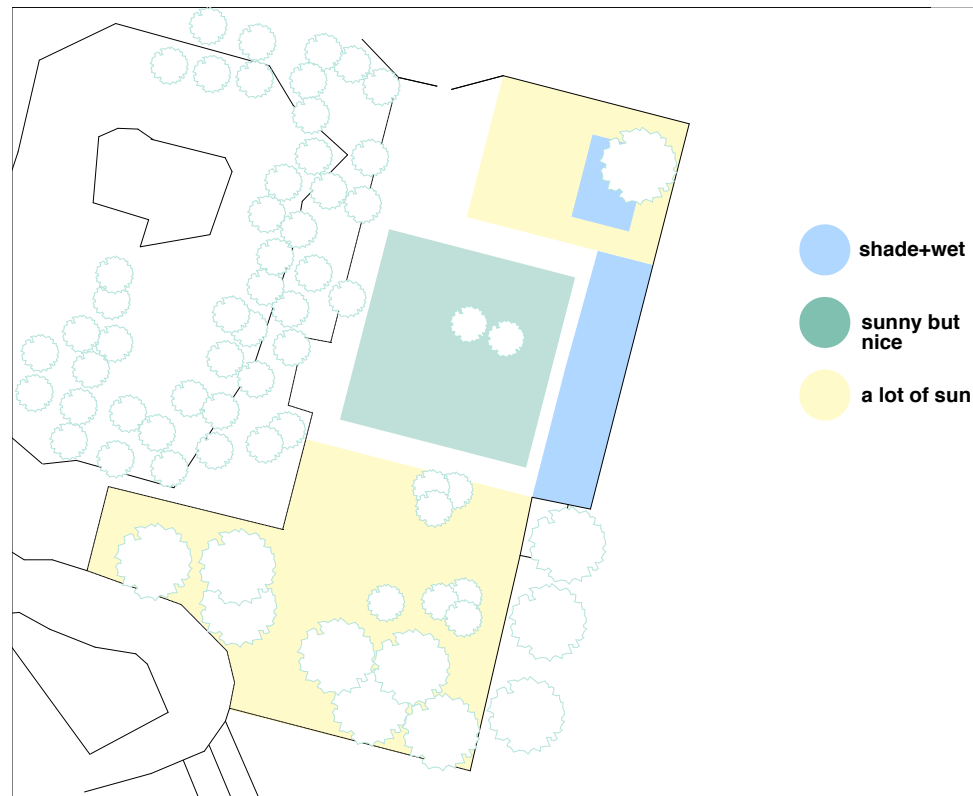


View to the north from Dunajska, Plečnik stadium and the Alps



South view from Dunajska, to Ljubljana North Gate





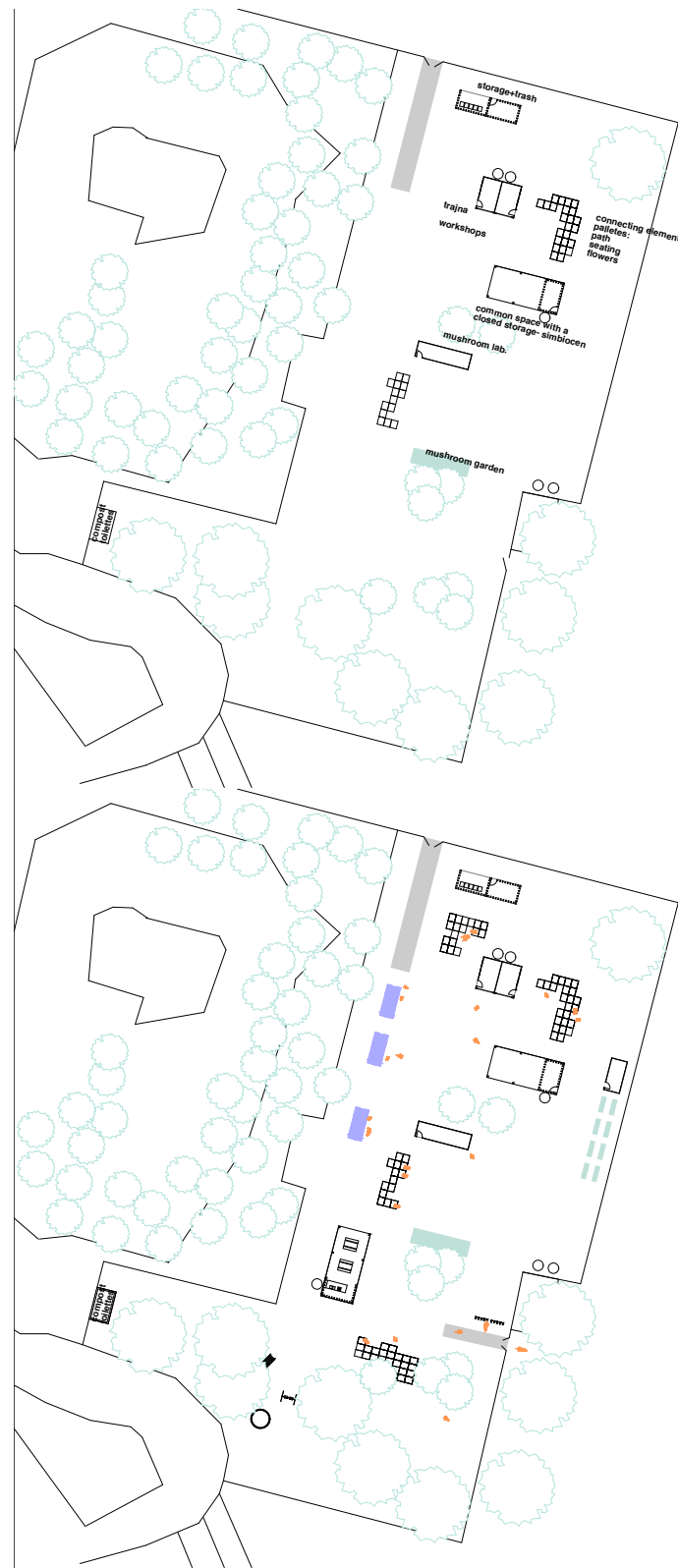
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THE OUTCOME

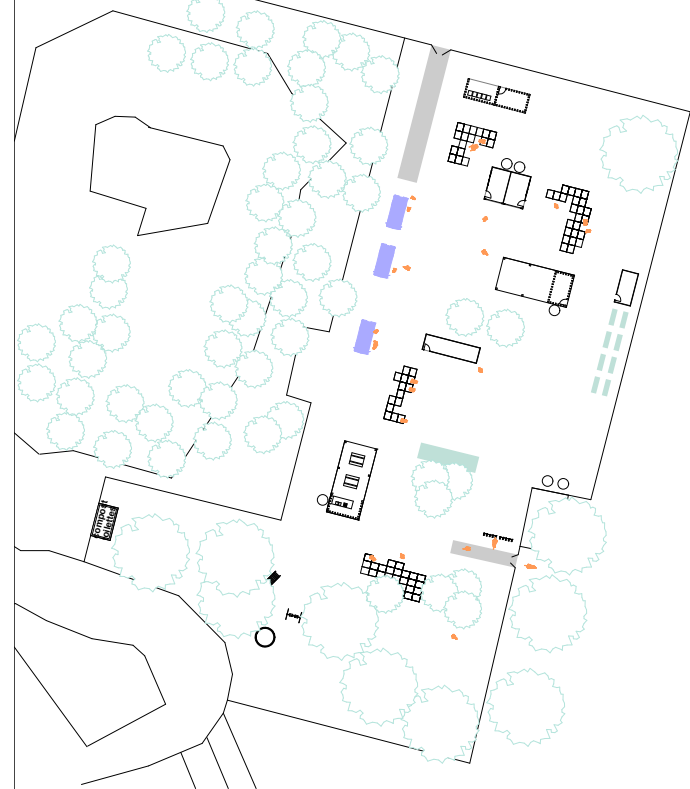
The idea was inviting people to a place not only to be involved but also a place to gather and socialize, so the idea is inviting people to work and meet within the workshop and the food event.



1 PHASE
simbiocen
requirements



2 PHASE
coworkers



3 PHASE
food event



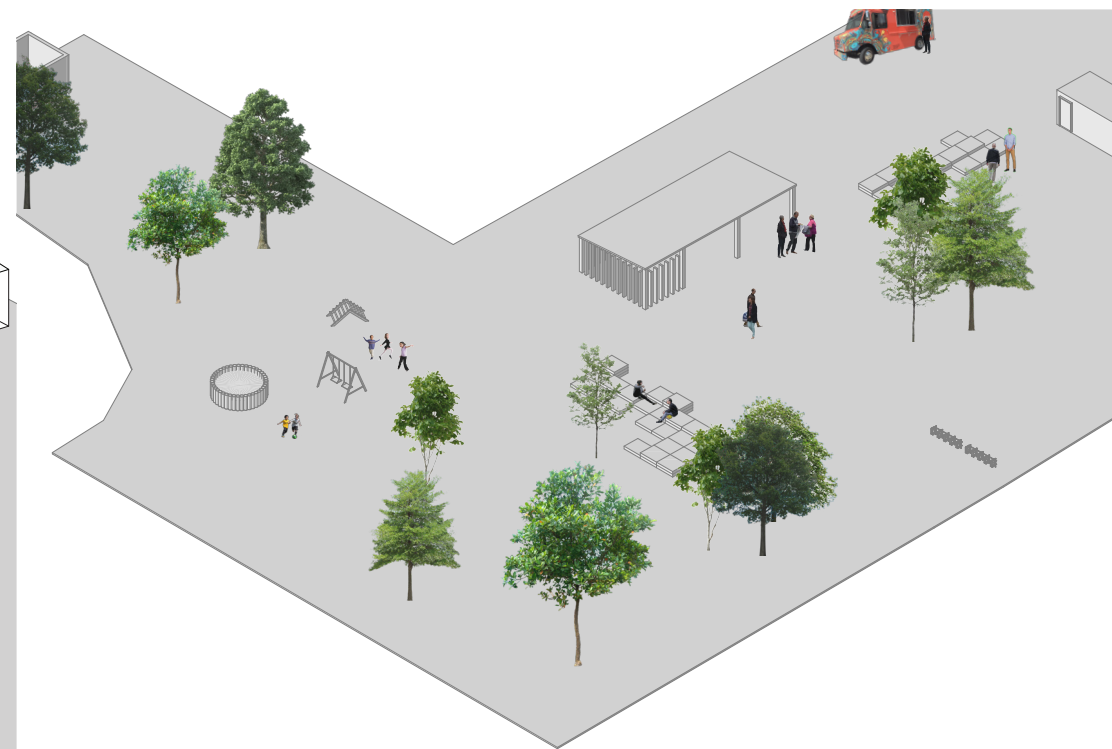
- 1 Trajna workshop connecting with common space**
- 2 Mushroom lab+ garden**
- 3 Common space for schools, students, workshop s, yoga**

simbiocen

The requirements of the Simbiocin projects were containers. To use them as an office or manufacturing facility. Beds for growing plants and mushrooms do need a special place on the site. Sun and semi-shaded places are absolutely important for the plants/mushrooms. Also it's important to access the site easily by any vehicle. A bigger gateway from the Topniška Ulica and a smaller from the pedestrian path in the westside.

other stakeholders

We talked with a yoga teacher and we tried to create a space apart from the simbiocen place. We developed boxes as a shelter and a multifunctional place to give a place to give a place to the stakeholder. Also we created seatings made of pallets, using a material which can be reused.



local residents and communities

Children have a disposition to discover the nature. So do adults. It's important nowadays to enlighten people to live eco-minded and taking care about the nature and the sources we have. So we would like to create a place where pupils are getting provided by the place.

place making

Place making means for us to create a place from people to people. The place can be used for different events. Our event contains a food event. We are strongly convinced that food is bringing people together. Not only because to appease hunger but rather to share the experience in a community and a specific atmosphere.