

A GROWING PLACE

The aim has been to form a Hidden place in to a space that will satisfy the various needs of diverse users along all those who may join in the future furthermore to plan an outline for subsequent growing of the place.

How many types of yoga do you know? And which one do you practice?

This kind of depends how broadly do you want to defend it, but the course that I did for the teachers training course was for Hatha Yoga. Which is basically a synonym of the yoga that is more related to the physical practices. As a supposition, I would say that is the more energetic one. Kriya Yoga, which I don't practice but I like. For my favourite one, I like Ashtanga Yoga, Amish Yoga style that is also the one that I teach. And from the ones that I have tried, there is also Bikram Yoga, which I go to sometimes, and these are most of the styles that I do.

What do you connect with Yoga in a daily life? Do you connect it to relaxing in nervous moments, to control your breath, connection with food...?

Maybe a good example is this moment now that we are in a pandemic state and isolation. Yoga really helps me, before when I was busy with other projects and work I stopped having this time for practicing yoga with myself at home and now basically for two weeks I have been practicing yoga every day, one or two times a day, so it really helps me to go back to my daily routine. And it helps me to relax and focus on my body and so on during this practice. It is because of the physical part, and also because breathing really helps you when practicing yoga and puts you in the present moment. I think it is a really good way of distress and do something else for yourself.

Do you see also yoga as a self-care or self-realisation or something like this?

I think it is a really healthy way to focus on yourself, and when you are really busy yoga flows you down and forces you to focus on your body, on your breath, on the way you feel. I also like doing other sports, and yoga is a really good thing for me to do beside, because it focusses on the whole body, on your whole well-being. I really like to combine yoga with tennis or other sports I do during other seasons.

How do you feel the connection with nature while practicing yoga? Do you like to do it outside, inside, both ways?

I like both. The first, of course, benefit of doing it inside is that you can do it during the whole year, teaching yoga this is an important file because if you want to focus teaching outside you are really limited to good weather. Inside, looking from teaching, is maybe preferred, because you are not controlled by the environment, it is easier to get this routine. But, of course, there are also a lot of benefits of the outside, definitely I feel the connection with the nature much more. When I am doing it in the outside, I would say that I prefer the outside environment doing yoga by myself, when I am just improvising and not taking a strict course it is more about the movement, the nature, stretching in a park on a nice sunny day. I have also tough some yoga courses outside, but as I have said, it is not that easy to find a place where people have privacy, where you have controlled that it is sunny, that the floor is not wet, that it is not too windy, and all those things that make it more difficult. But also it can be a very nice practice. Also when I go on holidays I also practice outside, in the sun, on the beach, on a terrace or whenever I have the option.

So, for you the worst thing when you practicing yoga outside is it the rain, or is also the wind?

Rain is definitely a big problem, wind is not that much. Let's say the floor is the second opponent, to be safe you need to have a really non curvy floor, because otherwise people can get hurt much easier and you really want to prevent any type of injuries. And the second part is more connected to if the practice is in the grass, it shouldn't be wet. If it has been raining one day before, it can be a problem. People bring the yoga mat and it gets dirty and it can be a problem for them.

Is it important for you the group connection? Or do you feel it more like a place for yourself? Or both?

Definitely both. I think yoga has a really wide spectrum of what kind of emotion or feeling it can figure. And it is up to the person to know what they need in a certain day. Sometimes you feel that you need to go out and hang out with people, and those days are the ones when you feel good when practicing in a group. Other day, you just need to be more introvert, it is good that you are also able to do it by yourself at home, in peace.

Then I have been researching about what kind of tools do you use, so I am going to tell you some that I have found and then you tell me if there are more or not. So the Yoga mat is it something that you use every time?

Yes. It is sometimes possible to do it without, maybe some of my students forget it then I let them mine because for me is easier to skip certain things that I can do without it. But for doing yoga is quite necessary to have the yoga mat.

AN INTERVIEW WITH A YOGA TEACHER

- anonymous -

My occupation is in law and sciences, so Yoga is more like a hobby. I started practicing Yoga about 6 years ago. When I was young, I trained Gymnastics and at 16 started dancing. Later I switched to Yoga, and really like the whole practice. About 4 years ago I decided to do the teacher training course here in Ljubljana after that I started teaching yoga in the yoga studio where I was also taking the course and then I extended to some of my private groups.

Which kind of clothes do you think are better? Or what should they avoid?

Usually people don't know this, I notice this a lot when people start practicing with me. So what I first learnt was that yoga needs to be done by foot, without socks on and people are used to have socks on. Unless it is really cold that in the beginning you could start having socks on, you should avoid using socks. And apart from this, you should wear clothes that are comfortable, that are not very stretchy.

I also know that sometimes aromas or candles are used, what is the interesting part of this?

Candles have two types of using. The first one is to set up the right lighting. So usually if you are somewhere inside, you don't have many options to kind of decide which lighting you want to make. So, instead of having a really bright light it is usually better to have much dark in the room, to feel nicer and warm, and I think candles give us this kind of light. That's why they are used a lot in yoga studios. Also looking to candles can also be a meditation practice. It is a very specific type of meditation where you are focused on candle's fire.

And is there something to do with the aromas of those candles?

Yeah, it can be as well, but at first, you have to be careful because you don't know which aromas are nice for each person. Maybe some aromas can be nice for you but not for others, you can produce headache to someone else. In my classes I never use them, I just use them in individual practices. And the candles they can be really problematic outside because the wind can make problems with them.

Do you have some type of theoretical classes?

Not specific theoretical class, but I incorporate it sometimes. Sometimes at the beginning, sometimes in the middle. It really depends on the class, in groups that is more into the physical part I don't focus that much on it. I encourage people asking questions and find if they have something that they want to know about.

Do you have more tools that I should have into account?

What is really nice and is another type of yoga that I forgot to mention before. It is Ginger Yoga style, that it is very focussed on the correctness of physical postures, everything has to be really aligned and perfect. This uses a lot of tools to help you achieve this. Yoga blocks are very useful tools, much more than candles and those ones. Because it can help you do the postures only to the extension you can do it but continue doing it correctly. Second one are blankets, they can be used sometimes instead of yoga blocks because you can use them as a helping tool, but specially in the end when the body starts getting more cold, I always use it to cover the body and feel warm.

How is the place you work nowadays?

I work in two places. In one of them, I teach yoga in an office, where there is a very big open space with carpets on the floor, what is really nice and warm. And the second one is just a gym, which has none of the yoga elements, but I like it because it is different from the other yoga studios.

What do you miss in those places?

If I wanted to go through a full yoga experience, definitely helps if the yoga studio is decorated a lot, which in my places I don't have so I need to bring everything there and it is a logistical problem. I have to carry there candles and all that stuff every time there if I want to use them. But I think that if the class feels good they don't need that, I think that a lot of studios have a lot of things there but that it is not the most important thing, that most important thing is how you make the people feel.

The next exercise is this one: I would like you to describe in three words the perfect place for you to teaching yoga. If you want you can make to columns, one for the inside perfect place and the other one for the outside one.

Inside:

- I assume that all the inside should have good floor, wooden floor is probably the best but it not necessary. But it is important that it is narrow, that it doesn't have halls or pings where people can hurt itself. So even if you have to do something apart from yoga mat you feel nice on the floor.

- The second one is the lightening, maybe in a place where I teach I really don't like how the lightening is and I don't have many options to change that. So this is the second thing, let's say that the lightening is adaptable. It is also good if the place has a lot of natural light, so for example, in the place that I have mentioned the walls are all glass and when practicing in the evening there is natural light and in the end of the practice it has gone so I don't actually need more lightening. I usually work with natural life, it is really nice.

- The third one is that it has to be big enough for the amount of people is going to take class in. For me the perfect is around 10-12 because it is the amount where you can still have a very personal experience and really focus on everyone.

Outside:

- As we said, not wind, not rain, not wet floor, very narrow straight floors.

- But it is nice that it has some trees so you don't practice directly in the sun.

- And that the place is at least some private, you know you have this nice parks that are good to practice, but you have those roads everywhere so people are sometimes not feeling the best.

So if I combine maybe the perfect place is to have a half-half place, an indoor place where you could open three out of four sides so you could have the shade the right floor, but also feel the brief of the outside and also have natural light and so on. This could be a perfect combination.

Would you like it add something?

So I have just remembered one more thing, what would be really great for this place to have is first of all a good place where people can change, and even a shower but I always taught in places that there isn't and this is not a problem. An also for me I have been teaching in places where I can't put the stuff and lock them in, and I really think that this gives you option for buying things for the class. Because if you have to bring them every day it is problematic, especially if the place is used by a lot of people because if it is your studio you can leave things there but if you share they need to use that space.

Are you from Ljubljana?

Yes, we appeared as a direct result of Intermediate Spaces festival in Graz (part of Steirischer Herbstfestival) and Ljubljana (Kapelica gallery) organized and produced by Trivia Art Association and ESC gallery in the fall of 2006.

Was Cirkulacija 2 born in Ljubljana?

Cirkulacija 2 is an artists' initiative based in Ljubljana, Slovenia. The name originates from the hall that we are currently squatting - the heating station at former bicycle factory Rog.

If not, why did you decide to move to Ljubljana? If yes, do you find it easy to have this type of business in Ljubljana?

It seemed almost impossible for individuals due to the scarcity of studios provided by the city officials.

If you weren't established in this area of Ljubljana, where do you think it would be a good place to establish?

An intellectually agile and dynamic human structure that can act as a specific social amplifier - if it can and while it can - in the place that we live in. In 2006 Stefan Doepner and Borut Savski made a first search on the many empty industrial spaces, owned at that time by the still fresh private entrepreneurs, some dismantled factories waiting to be sold, real estate companies and banks. There was either no reply or the answer was "we have other ideas".

What do you think that are the pros and cons about the location of your establishment? Does the government provide help for these kinds of establishments?

Since mid of 2009 we are registered as association (NGO), allowing us to apply for public funds and do relatively independent productions.

Do you find enough presence of your establishment on your public environment?

Three bigger centralized production spaces were open in the last two years, but they must fulfill the day-to-day public service of providing art, dance and music events for the niche citizens. There is another place in plan: the so-called Center for Intermedia at the same Rog factory where Cirkulacija 2 is situated. It is very hard to think that it will not be built and organized in the centralized manner of providing specific services for the citizens.

Do you think that arts play a big role on the general population of Ljubljana?

Recently a question was raised - is there a contemporary art scene in Slovenia. A scene as something monolithic and strong. It is strong and numerous, but it is not monolithic. But it provides enough of variety and points of self-reference not to repeat itself. There is a clear difference between generations of 70's, 80's and 90's, also with some of the flashbacks from artists nowadays to the still surviving participants of some past initiatives. However, no direct transplantations of the past are possible or needed. Maybe for ideologic use of rewriting of local art history or filling in the gaps.

As a representative of your establishment, how would you describe your work in three words?

We defined the Cirkulacija 2 as interdisciplinary station allowing us to embrace all the variety of actions that we are able to perform - from the very individual authors' works to the organization of festivals.

Do you think that your establishment covers a specific necessity from your surroundings?

The basic idea about Cirkulacija 2 was to satisfy our basic individual needs for a working space.

In that case, how would you describe that necessity?

The group's aim is to create a series of dynamically changing, yet progressive, collaborative situations - workshops, laboratory, presentations and discussions where ideas can (e)merge and experiences can be shared.

Could you describe your working space?

One should keep a modular, non-specialist structure and prefer the privately owned property of individual artists to the collectively owned means of artistic production (the institution). Individuals should provide for their personal economies and the collective aspects should be collaborative and handled in the most transparent way. This should be seen as the practice of intelligent social behaviour. And maybe: there should be a clear definition of boundaries - of non-equality between the spaces - a kind of ideologic differentiation between the artists, gallerists / curators, artists' places, galleries and other places - media included - to get out of the uniform consumer oriented world of service providers.

If you could keep only three things of your present working space what would they be? And if you could add 3, what would they be?

First is the protection of the micro social and ideologic environments. The second is the necessity to act in public. The third is the notion of a collective as cybernetic structure - with the necessity to change through process.

CIRKULACIJA 5 Group of artists

Cirkulacija 2 is an artists' initiative based in Ljubljana, Slovenia. The name originates from the hall that we are currently squatting - the heating station at former bicycle factory Rog.

Glede na odziv predvidevam, da ste zainteresirani za sodelovanje. Zanima me v kolikšni meri ste pripravljeni sodelovat oz. kako si predstavljate naše sodelovanje?

Informacijo o projektu bi defnitično popredotala razredom, ki jih učim. Zlapi t tišjih letnikih, ker po bolj zainteresirani, bolj zreli in razgledani.

Zanima me, če mogoče veste, kašne dejavnost in aktivnost se bodo odvijale naslednje šolsko leto v sklopu gimnazije?

V tem trenutku težko odgotorim. Imamo pa poleg rednega pouka tudi OIV, Obtezne izbirne tpebine, iz različnih področij: ozateščanja, zdratpttene tzgoje, kulturnih prireditet...

Pri katerih od teh dejavnost, vidite možno 'sodelovanja'?

Mogoče kaj na temo ekologije, možnopi različne rabe tal...bolj t tišjih letnikih

Ter kakšne aktivnosttdejavnost bi zanimale vas in profesorje pri ostali predmeth(pouk na prostem...)?

Dejatnopi, ki bi pokazale različne namene rabe urbanega proptora.

Veliko aktivnosttdejavnost se odvija v sklopu nekega predmeta. V sklopu katerih predmetov menite, da bi bilo zanimanje največje?

Športna tzgoja, biologija in umetnoptna zgo dotina ... Pomemben faktor po nagneteni učni načri

Prostor gradbene jame želimo čim bolj uredit in prilagodit potrebam uporabnika. Kaj bi potrebovali ali bi želeli met za izvajanje aktivnost (klopi, mize, vrt-grede, ploščad (za športne dejavnost)...)?

Mogoče tpe kar je natedeno.

Imate mogoče še kakšne informacije ali ideje za katere menite, da bi mi bile lahko v pomoč?

Vpekakor bi bilo tredno ogleda, predtpem mogoče t pmiplu OIV ali pa razrednih ur.

AN INTERVIEW WITH A GIMNAZIJA BEŽIGRAD

Marjeta Vidmar

Teacher and a coordinator at high school Gimnazija Bežigrad.

If you had a chance to make a practice with children in an environment of nature and animals what would you do?

Teacher A: would go into a farm house, or farmer family and try to teach thanks to it. It also gives a chance to teach about trees.

Teacher B: would go also to a farm and make two groups 4-5 years old children, could see farm animal and study how they behave and how to treat/clean them. 7-8 years old children could go around the forest to learn about other types of animals by finding them with telescopes/spy-glass.

Teacher C: would also go to a place to learn about animals by making contact with them.

What advantages and disadvantages does it have to be on an indoor class?

Teacher A: the only good thing/ characteristic that I see for indoor spaces is that it prevents most of distractions that could be caused by outdoor elements. She is into outdoor spaces, they make them feel free and explore.

Teacher B: thinks that advantages are that an indoor space has, are the order and safety it gives. Disadvantages are that it grows down children's freedom, it makes less creative place and there is a schedule.

Teacher C: advantages is that children learn to be indoor spaces and that is very important for the future. But she thinks that time spent indoor is too big comparing with outdoor one.

What about outdoor spaces?

Teacher A: Same

Teacher B: Advantage, big spaces for children to be themselves and to get their necessities. It also makes for less fighting. A disadvantage is that some spaces can be not safe enough.

Teacher C: it can be really dangerous for these children because of their age, and it depends of how many children there are.

What advantages and disadvantages does it have to be on an indoor class?

- Teacher A: the only good thing/ characteristic that I see for indoor spaces is that it prevents most of distractions that could be caused by outdoor elements. She is into outdoor spaces, they make them feel free and explore.

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HOW TO CONTACT WITH CHILDREN

In order for children to express their ideas, it is first necessary that they understand the different forms of representation that can be known in architecture. We are looking for some architecture workshops for children between 3-8 years old.

We find ETRA, an artistic education project for children, focused on architecture. Some pedagogical dynamics are based on teaching to understand how the plans are made. To draw a floor plan of a house you have to learn to draw a glass from above. And a glass from above is a circle.

Furthermore, they seek to turn everyday objects into pedagogical tools. Sticks and cubes of high-density foam rubber can be operated as a beam and connector.

In conclusion, something very interesting would be to teach children to express themselves architecturally and with everyday objects. The easiest way would be through drawings that could be done following a series of previously recorded indications, as if it were a "video tutorial". Thus, we facilitate the work of parents, and we transmit more confidence to children.

LOCAL USERS SURVEY (CONCEPT)

Kindergarden and preschool children

To find out how the children could be addressed, we asked three teachers a series of questions to find out their point of view.



- ↘ Wind
- ▨ Gravel
- Concrete platform
- Really sunny area
- Noisy areas
- ↘ Entrance
- ↘ Plans for future entrance
- ↗ Garage entrance

No **water** source. Different possibilities to get it, for example from rain water.

Animals that can be found:

- Soil animals
- Small animals
- Birds
- Pollinators

Plants that can be found, invasive plants:

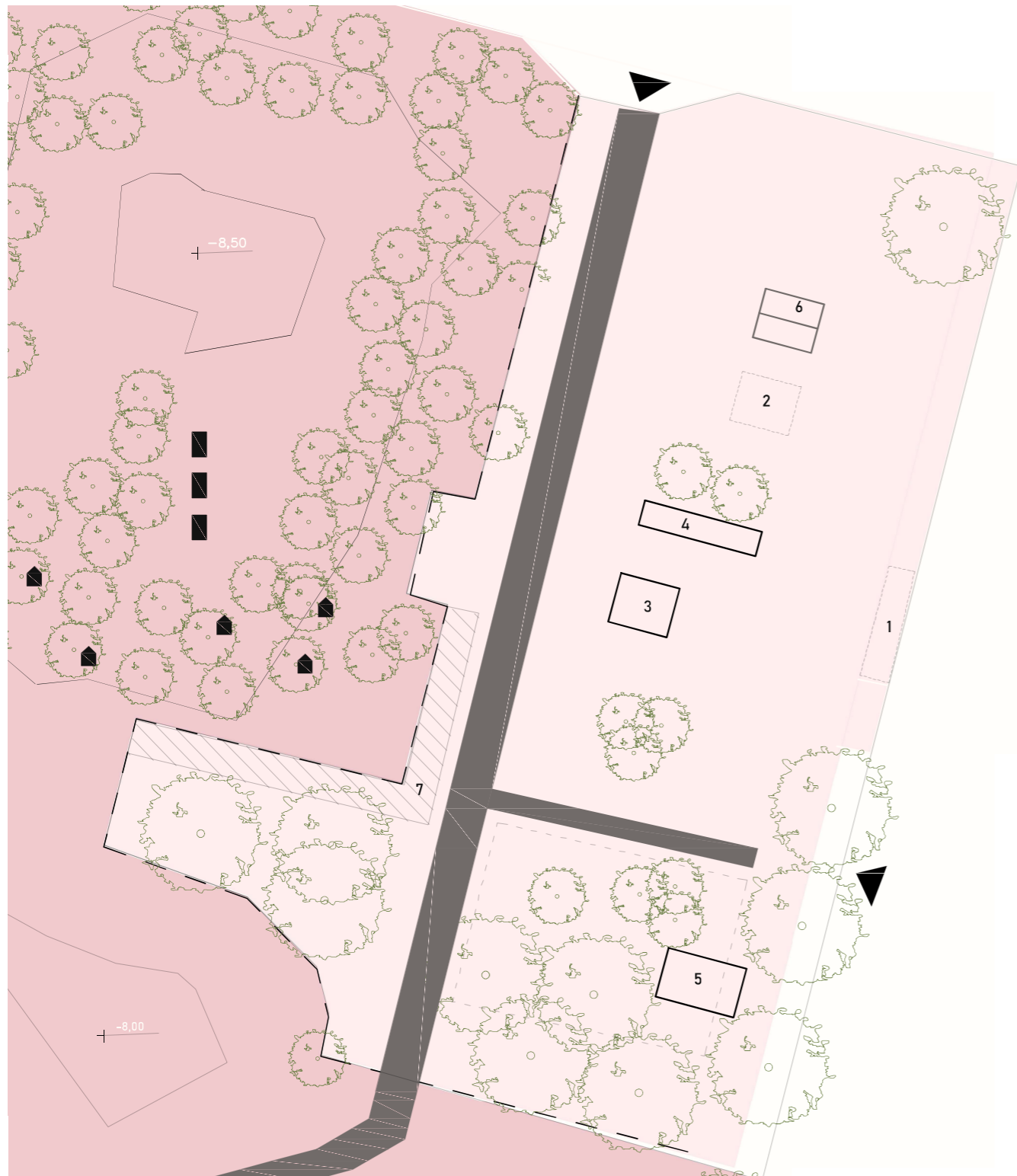
- *Ailanthus altissima*
- *Solidago canadensis*
- *Robinia pseudoacacia*
- *Reynoutria japonica*

Normally 20 **people** per workshop, but opportunity to make spaces until 50 people.

THE PROCESS analysis

This analysis shows how the place was before we started working on it. It was important to know how was the surrounding of the terrain and which factors could influence in our project.

ANALYSIS PLAN - GROUP A. Daniela Leccese, Oriol Gracia, Lara Jana Grabijel, Daniel Hernandez, Eider Oruezabala.



CONCEPT:

- People free area = animal shelters
- Social interactions area
- Paths
- Entrance

- 1 experimental mushroom beds/garden
- 2 experimental garden
- 3 laboratory for wood and paper
- 4 container - laboratory and grow room for mushrooms
- 5 roofed and paved outdoor space for workshops, lectures, work
- 6 Greenhouse
- 7 Look out points

- Water reservoirs
- Bees
- Bird houses (Big trees)

THE PROCESS

design, thinking, ideas, iterations

Our first ideas for the project were always about minimum intervention: in that way the users could enjoy the nature of the place and maintain the connection with nature despite being in the city beside the main street. As the minimal concept was also applied to the costs of the intervention, we were always thinking about cheap or recycled materials, which would be easy to manipulate and even a way to engage the local community. After looking over different examples, we decided to go to a modular structure, which could be easy to build and also easy to expand if required.



THE OUTCOME

The intervention is divided in three main areas: the gardens on the top, the Simbiocene labs in the center and the community area in the southern part. All three are connected by the main path, which connects with the rest of the plot and the observation area. Each area has a small structure that can hold the different activities from the variety of users, and a big open space that allows to make activities outdoors or also to expand the structures if needed.

simbiocen

The Simbiocene laboratories are placed in the center part of the area, connected with a secondary entrance in the East wall, so they can enter materials and take the waste through a different place than the main entrance. Also, it is placed close to some trees which will provide shadow for the mushroom laboratories, and it has its own space apart from the other more public areas.

other stakeholders

The community area in the southern part is a flexible structure which can hold different activities, both indoors and outdoors. As it also incorporates storage space, all kind of materials can be kept there and used only when needed. As it can be opened, it is also a roof outdoors protected of the sun or rain, and activities can take place there. As it can be divided, the space can be transformed to suit the amount of people participating in the activity.

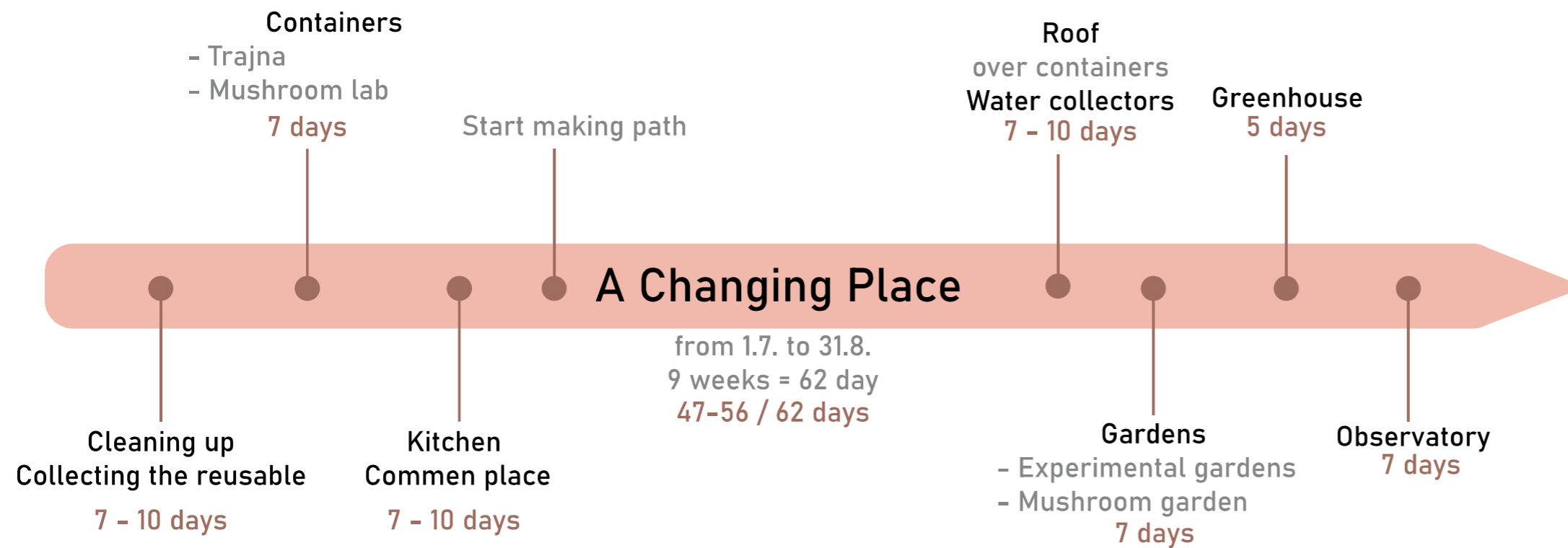


local residents and communities

To approach to the local residents, some of the construction process could be done as an open workshop, also collecting recycled materials from them. The gardens areas can be open for the residents and can be used for the schools as an educative place about nature and agriculture. The community area can hold many types of activities which can be for the community, as workshops, picnics, classes...

place making

As mentioned before, some parts of the intervention are planned to be constructed as open workshops for the locals, in a way to invite them to see what's happening in the other side of the wall and make them feel like they are helping to develop the place. These workshops can be from making the irrigation system for the plants (using recycled plastic bottles), maybe some furniture for the community area or the observation one, and also educational programs about the nature of the place, using the gardens as a pedagogic tool and the infrastructure of the labs and community kitchen as places where all kinds of sessions can be held.



Timeline

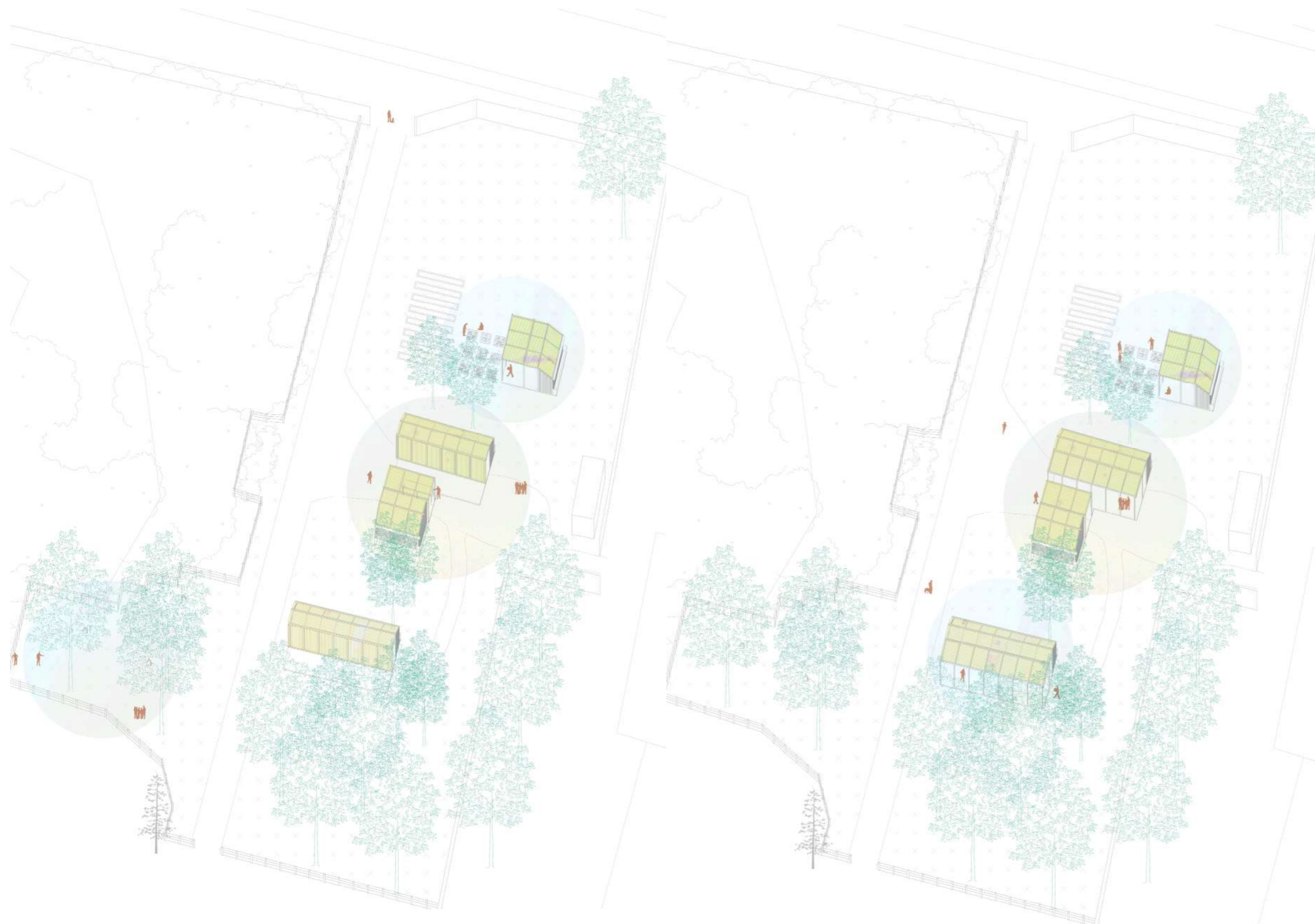
The place is planned to be made in two months during summer from July till the end of August, that is in 62 day. The plan is divided in to 8 steps for each step it is planned to be done in 7 or max 10 days. Considering that the place should be done in 47-56 day witch still gives us 8 days reserve, if anything unpredicted happens.

We would start by cleaning up the place, collecting things that can be reused (wooden sticks, rockes,...) and preparing the terrain for containers. After containers would be brought in the kitche and commen place will be build. With main buildings standing the paths between can be done and be added with every following step. It is important that water collectors are instalt after the roof over container is build because that would be the biggest surface for collect-ing water. On the end the gardens with greenhouse and ob-servatory would be made because they are the easiest and fastest to be done.

THE OUTCOME

PROGRAMME

The main point in this project is the comfort and versatility of the program. The project is characterized by these four volumes that are adapted to the context and function of the activities depending on the time of day, the time of year and other possible factors. This is achieved by the folding doors that become awnings and the fabrics on the inside that separate spaces. In this way we can see different environments:



MORNING

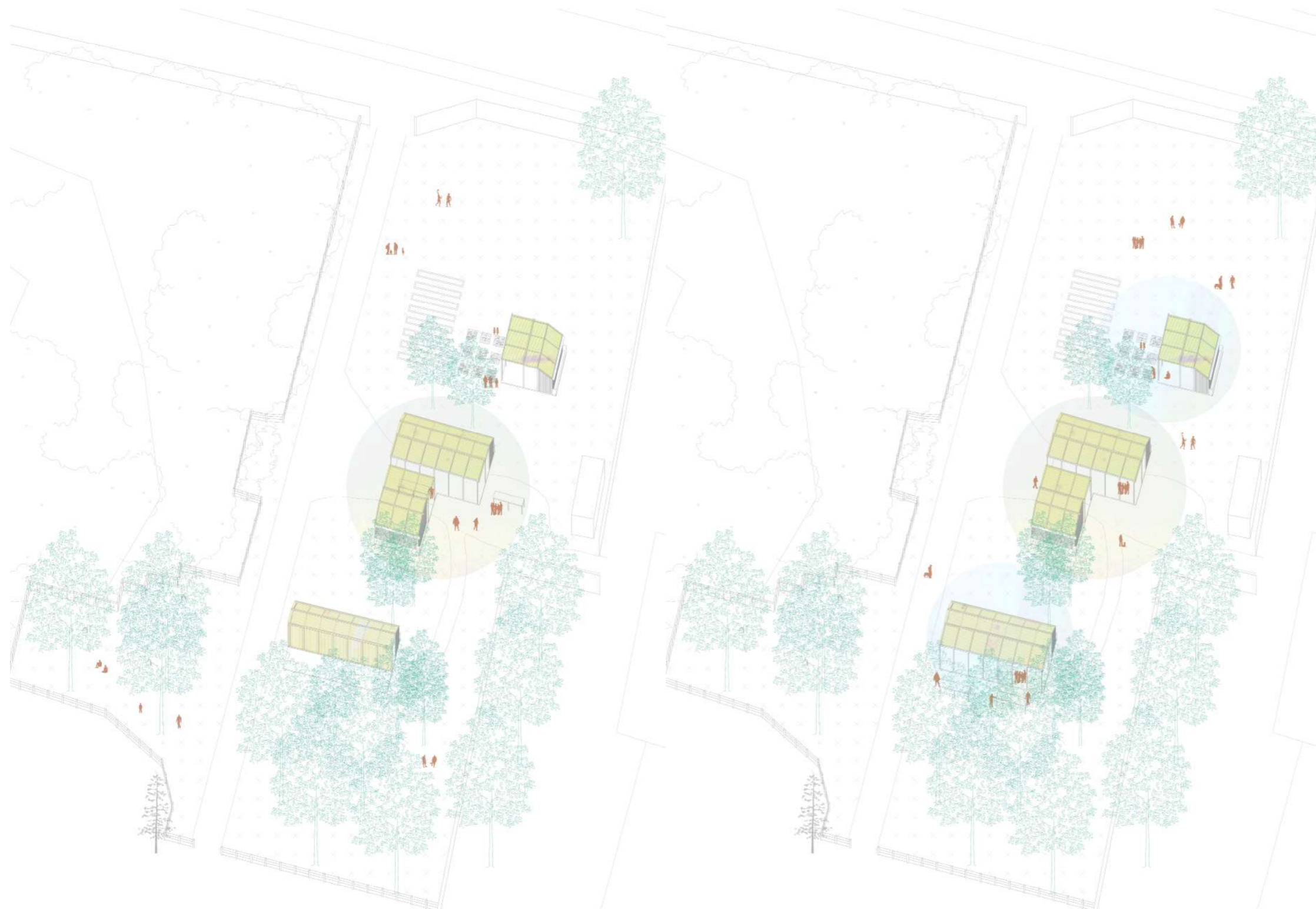
NOON

Morning (06:00)

We start the day by watering the plants in the greenhouse, garden and in the mushroom laboratory, putting everything in order for the workshops and activities of the day. We can also see some people in the observatory, watching the birds early in the morning.

Noon (12:00)

The workshops have been running all morning, and the kitchen is open for lunch. Trajna's office is also open, creating together with the mushroom laboratory an indoor-outdoor space where many activities can take place. The greenhouse is a very active space thanks to the workshops of Abandoned Plant Sanctuary.



AFTERNOON

SUNSET

Afternoon (16:00)

The space created by the gravel and wood paths next to Trajna's office is ideal for activities with the different users, such as yoga classes, workshops with children and art exhibitions. As it is a very sunny hour, users can enjoy the afternoon under the trees in the observatory.

Sunset (20:00)

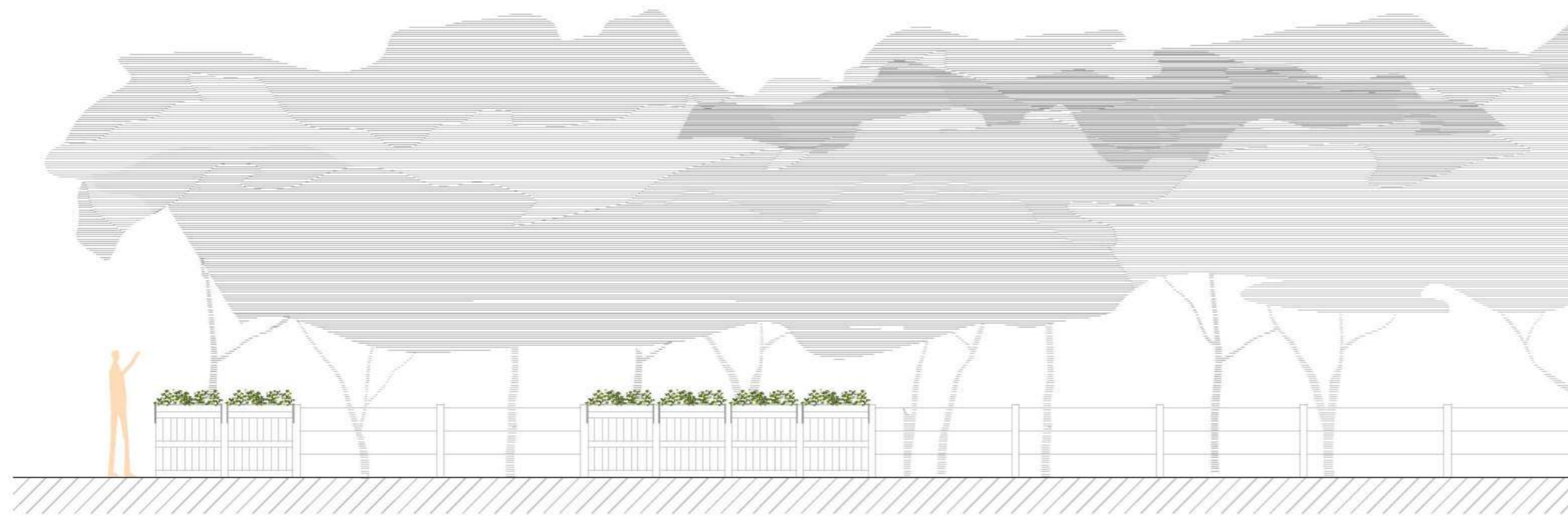
On a summer day, at sunset people can enjoy many outdoor activities. An atmosphere of community is created, with the soft light of the sunset and all the programs open.



Night (00:00)

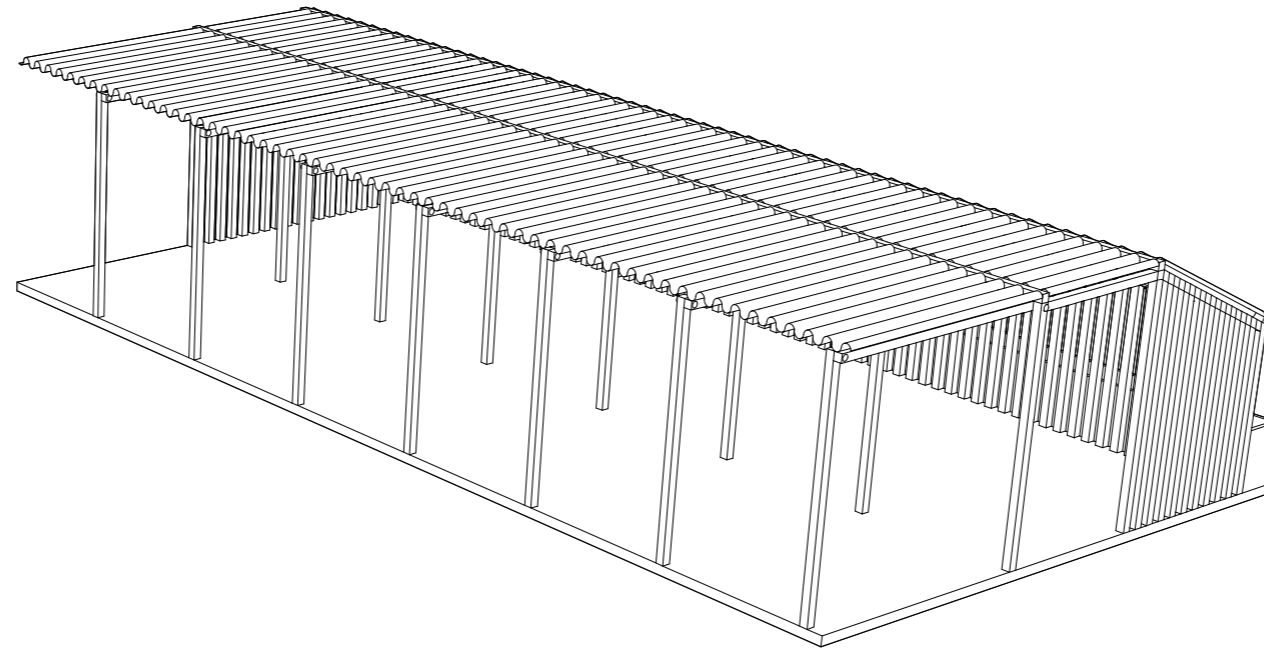
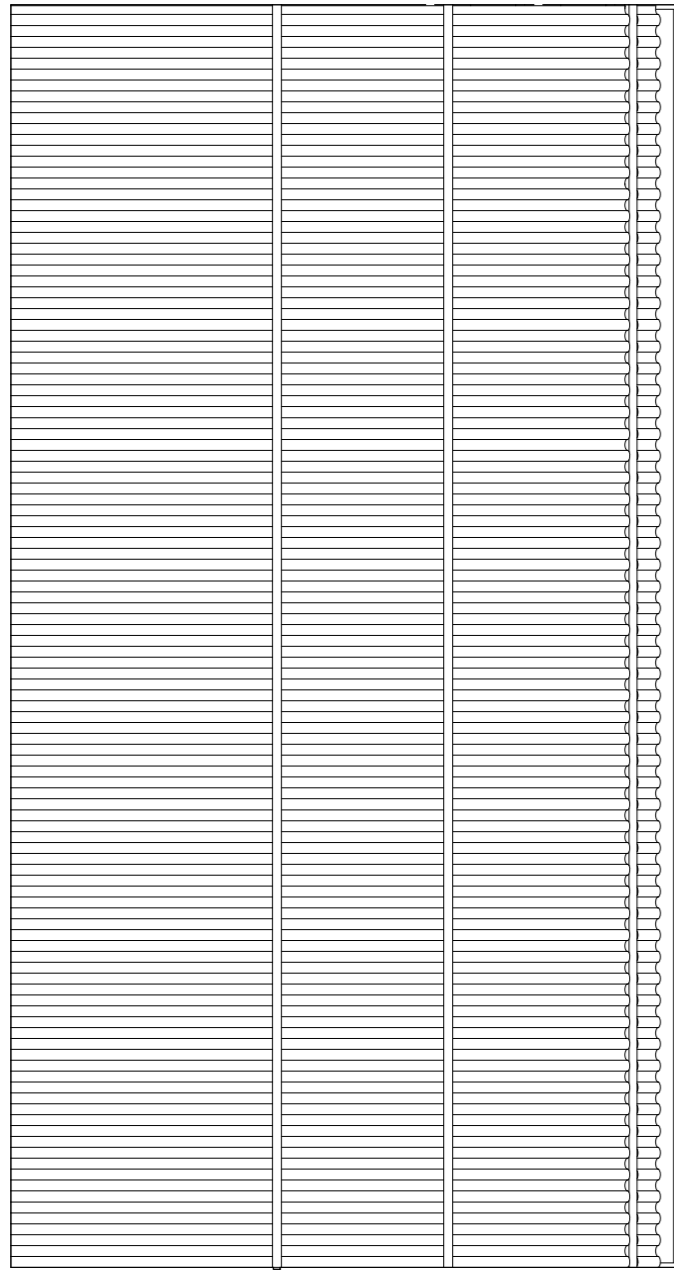
Everything would be closed already, but you can see some lights on inside some rooms, like the kitchen, replacing the storage to be ready for the next day.

NIGHT



Transformation of the fence

In order to divide the intervention area with the rest of the plot, we propose a new fence that makes a barrier between the area where you can walk freely and the untouched nature. The fence design is divided in two types: one made of pallets (which can be used as a place to put plants, hang advertisements, and also as a lookout in the observation area). The other is a simple physical barrier for people, but not for animals, made with wood sticks and metaling wire, so you can't cross it but you can see through it completely.

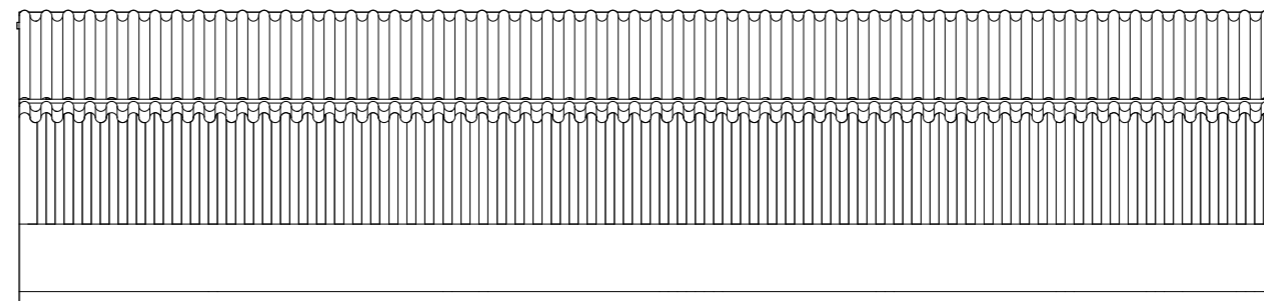
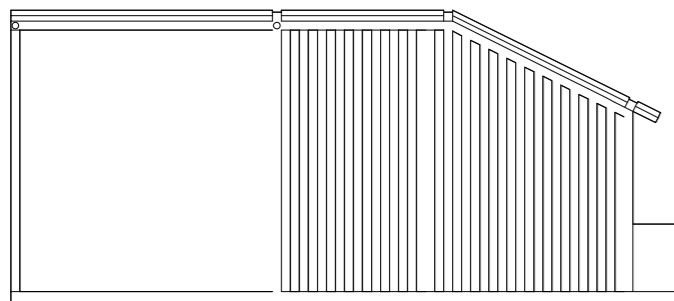


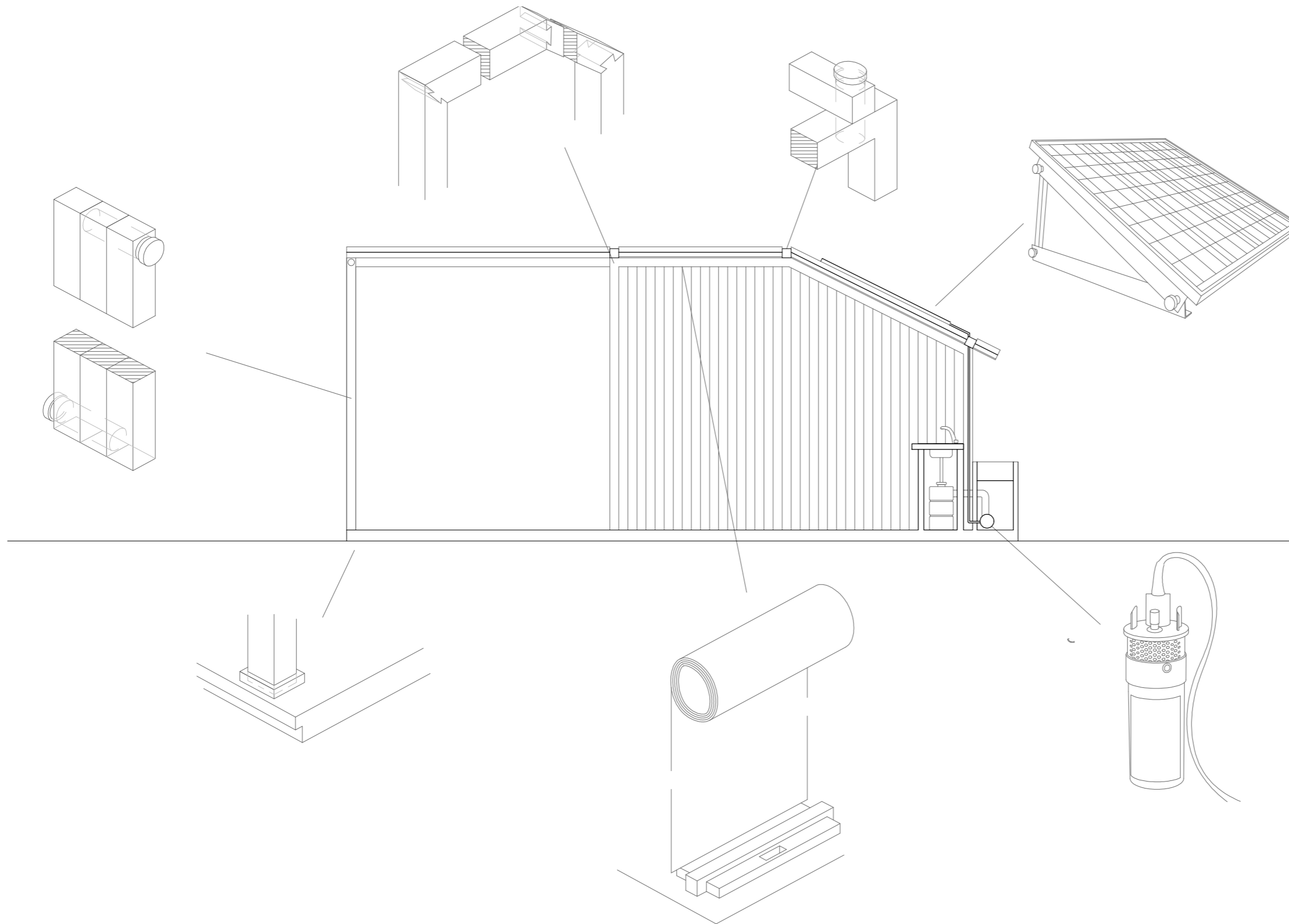
Kitchen - common place

In order to design the spaces according to our ideas and fitting the suggestions and interests of the symbiocene project, we decided to create a space that could be used in different ways, easy to build, and changeable according to the different interests of the users.

We decided to take a simple volume and create a skeleton made out of wood so that it would be eco-friendly and it also wouldn't take too much space just for the structure.

From that volume, and changing the roof, we were able to introduce the caption of rainwater into the project and by creating a system that allowed the user to unfold one of the faces of the volume we created a more flexible and open space.





Kitchen - common place

Continuing on the ideas of sustainability and easiness of the project, we proposed a system where the structure is not glued using metal screws or other kind of metal elements. We use instead the different ways of creating creations between wood, so that way we can make it completely re-used.

We also propose the use of a system of water pumping based on the use of solar panels, using that way clean energy.

Recycling wood in Slovenia

There have been different initiatives of recycling materials in Slovenia in last years.

Reuse center. Ljubljana, 2003. Reuse of old, redundant or damaged objects and give joy to new users at the symbolic price.

InnovaRenew. Izola, 2017-2019. Development of an application for collecting waste wood.

Razvojni Center, Koroskega, Gospodarstva. Oza-re, 2017. Development of innovative, modular, prefabricated wooden wall.

Reusing wood cheap or expensive?

Comparing different websites of the cost of recycling wood the average of the price is between 0.021 €/kg and 0.025 €/kg.



OPTION 1- CELLUWOOD

The main objective of CELLUWOOD is to develop a new range of low carbon, reliably strong building construction materials made of wood and based on innovative technology applications.

Use of bio-based resins as natural and sustainable alternatives to traditional petro-chemical formaldehyde adhesive materials.

The developed eco-beams and eco-columns are strong re-engineered timber products bonded by a natural bioresin system.

ECO-BEAMS and ECO-COLUMNS

Process proposed as a workshop:

1 STEP: Contact with different constructions and get surplus material that they don not need. The material needed are wooden defect beams and lignin got from other industrial processes. Other option is to use nanocellulose instead of lignin, but in this case this will need to be done on a laboratory.

2 STEP: The material that they need for the 3 step are laminated with defect-free lumber that is produced with CELLUWOOD defect extraction and repairing technology. For that, the extra material needed pans for keeping the lignin and gloves to make the repairing process.

3 STEP. This is when they will need to test the repaired material and they will need a compression machine to test the beams.

4 STEP. Make the joining pieces for the structure and the platforms.

OPTION 2- GLULAM

Simple, fast, light, stable.

Big strength with low weigh. It can hold big spans, up to 10 m.

The process consists on joining laminated wood with melanin resin glue and polyurethane resin glue.

They work with wood produced in reforestation process.

MATERIALS

Structure and platforms

CORRUGATED POLYCARBONATE LAMINATED

Resistant to climatic conditions, long durability and it cleans with the rain.

Strong material, easy application and impact resistant.

Lets to enter the light, but also protects from UV ray.



CLOTHING FOR THE PARTITIONS OF THE SPACE

OPTION 1 - White polyester clothing – not sustainable (cheaper).



OPTION 2 - Organic cotton clothing – sustainable (more expensive).



OPTION 3 - Patchwork – Workshop where people bring clothing that they don't need and join them making the partitions.



MATERIALS

Roof and clothing

OPTION 1 - SOLAR PANELS + PUMP

Professional knowledge and cheaper.

- Monocrystalline solar panel
- ECO-WORTHY Waterproof pump



OPTION 2 - PUMPING KIT

Easier application but more expensive.



Bomba



Panel



Cuadro

MATERIALS

Water collecting system

PIECES	MATERIAL	PRICE	SURFACE/QUANTITY	COST
STRUCTURE	Eco-beams and eco-columns	...		
	Glulam	...		
ROOF	Corrugated polycarbonate laminated	26,87 €/m2	105 m2	2821,35 €
CLOTHING	White polyester clothing	6 €/m2	80 m2	480 €
	Organic cotton clothing	9 €/m2	80 m2	720 €
	Patchwork			Very cheap
WATER COLLECTING SYSTEM	Solar panels	119,99€	-	119,99 €
	Waterproof pump	0,27 €/w	160 w	43,2 €
	Pumping kit	1250 €	-	1250 €

MATERIALS
Budget