HOME

The making of a healthy house in a natural setting, with low financial and emotional cost.

Anticapitalist architecture
another architecture is possible
PROLOGUE:
First of all, setting up a home for little cost in terms of the earth, finances, emotions and morals, with the transcending aim of health, peace and awareness was a first time experience for us too.
Our intention here is to share our experience with others who wish to do the same. It is important to be aware from the beginning, that each individual will have their own experience according to their own individual circumstances.

WHY?
Our pursuit addresses three fundamental physiological needs, that we did not have access to in the 'city and consumption' culture that dominates today's lifestyle.
1-WATER
2-FOOD
3-HOME
Away from the environment that presents the first; in plastic bottles, the second; in plastic bags, the third; immured in between four walls. A piece of earth with even the tiniest spring of water naturally provides the first two. Here we share our experience of the third. A point about the first two to keep in mind, is that the remote rural regions that have been abandoned due to urban migration and far away from land price speculation are consequently the cleanest areas that allow the most independence, and can be obtained at little or no cost.

MATERIALS:
Our home was built using materials sensitively collected from it’s surrounding environment. A great deal of care was taken to minimise the disturbance caused to the living things around us and to combine logically and harmoniously with the materials used in our closest settlement.
Our building was designed according to our own unique circumstances. The materials used; rocks, earth, shrubs, manure and logs were collected from our surroundings and doors, windows, wood, a sink, tires, taps, glass.. were all waste from the nearest settlement.

‘the right materials are those closest to you’

SELECTING THE SITE:
We situated the rear side of the house facing a little hill to the north. Therefore it is protected from cold weather from the north and facing the winter sun from the southern facade. So from the offset, these considerations minimized future consumption for heating, ventilation and illumination.

BUILDING:
During the building of The Home, two of us worked 8 hours a day for 74 days of the 94 day process. We paid attention to alternating the use of different parts of our body (yoga), focusing on our breathing (prana), and the awareness of what we were doing (vipasana). We worked in accordance with the moon (biodynamics), and the rhythm of nature (weather). We didn't experience any health problems, or wear ourselves out, on the contrary, we completed building The Home while gaining health, strength and peace.
1- LEVELLING THE SITE:
For the plinth wall of The Home situated on a northern ridge, we levelled the ground using earth we dug off the northern slope to fill the stone platform we built on the southern side. The excess shrubs, rocks and earth from the levelling process were put aside for later use. We stabilized the open earth wall on the northern slope using stone masonry.

2- SITE PLAN:
The home was designed as a 5m diameter circle (=20mt²) and directions and positions for the pillars of the home were marked on the site using ash. The size of our family home, excluding bathing and toilet space, was determined using the criteria of maximum peace and health, through minimum energy and product consumption, at both stages of construction and living.
3- PLACING THE PILLARS:
The pillars were made of logged and peeled kermes oak (Quercus coccifera), one of the dominant tree species of the region. The 60-70cm part that was to be buried underground was burnt until dark, using firewood from another of the widely available species of the region, Turkish pine (Pinus brutia), and these were placed in dug out holes, and reinforced with rocks.

4- PLINTH WALL:
The circle built with large rocks from around up to 20-30cm above the pillar bases was filled first with large rocks, then pebble and finally levelled with earth sprawl and trampled, to fill the gaps between the pebbles.
5- PLACING WALL-THICKENING POLES:
In order for the walls to be as thick as we wanted them, we tied peeled holm oak logs to the pillars at 2-3 points with wire.

6- PREPARING THE WALL CASTING:
Oleander (Nerium oleander) branches cut in the area, were nailed every 20-30cms between the poles, on the inner side and the outer side, up to the level of the roof poles, excluding gaps for windows and the door.

7- FILLING THE WALL CAST WITH SHRUBS:
Leftover shrubs from the levelling stage, and branches cut off trees to make pillars, were stuck into the wall cast made of oleander, leaving openings for windows and a door.
8- PLACING WINDOWS:
Suitable windows found in the waste of the nearest settlement (demolished buildings, junkyards and dump sites) were correctly aligned, and were fixed with nails to the pillars using wood and pieces of branches.

9- PREPARING THE WALL CLAY:
The earth dug out for levelling, (without sieving, just removing large rocks) was mixed with hay and straw, remaining from the lentil harvest (wheat straw would also work) and pine needles lying around (anything similar to that is ok). Water was added and the mix was trampled until it became really sticky (not too watery nor too dry) and left to rest for a night.

10- PLASTERING THE SHRUB WALLS WITH MUD:
The shrub was plastered with mud from the inside and outside, filling visible holes with stones where necessary. Thus, the gap of shrub, between the inner and outer mud plaster performs as insulation between the effects of the inner environment against the outer, and the outer against the inner.

11- PLACING ROOF POLES:
The pine poles were cut and peeled so that their thinner ends had a 15cm diameter minimum were placed according to the ‘mandala’ roof system (reciprocal roof). The mandala roof system enables carrying the large loads of adobe roofs in circular buildings without a central pillar. Also, when desired, the mandala roof makes it possible to place a window of the desired size for illumination from above. We arranged the top hole we were to cover with glass using a tire we found as trash as a sizing measure. A supporting pillar was placed at the desired roof height, to the edge of the desired top windowline, and the roof poles were put on top of each other one by one, defining the circular circumference of the top window. When each pole is placed on top of the other, it is tied tight with a wire so that it does not move.
After the last pole is pushed underneath the first, the supporting pillar is taken away so that the mandala roof poles jam into each other and settle. After the poles are settled well, if desired, they can be nailed onto each other with a large nail. Lastly, the longer pieces sticking out of the edges or the top are cut off.

12- NAILING THE ROOF TIMBER:
Due to limited time we had to purchase readily usable timber. However, junk construction timber or such materials can be used to cover the roof.

13- LAST COATING FOR THE WALLS:
Before the last coating we placed our door and windows and fixed them in place. To cover the cracks that formed after the walls had dried up completely, we coated the exterior with clay, made using only sieved earth. For the interior we made a kind of emulsion using 3 units of sieved earth to 1 unit of cow manure, 1 unit of clay we got from the river near us and ¼ units of white earth, a unique local type of soil and mixed it all together with water. After this coating dried up we moistened the walls slightly and glazed them with a piece of leather. For the interior, sieved earth and fresh cow manure are actually sufficient, but local natural strengthening materials and techniques can be used to make the coating richer.
14- ROOF INSULATION:
Firstly, to hold the materials we were to cover the roof with, we nailed timber barriers at the end of the eaves. Finally, before spreading the roof materials, we put the tyre we had found for the top gap, positioned it to cover the roof poles as well and screwed it into the poles. Over it we pasted a thick piece of glass that we found which was large enough to cover the gap using silicone.

At first we covered the ceiling timber with a waterproof breathable layer we found at a warehouse and purchased at a reasonable price of 120TL (70$). Considering our inexperience this, while not necessary, was insurance against any potential problems that could arise from the natural materials that were to be laid above it. Over this layer, we laid the rush we cut from nearby, and over it the pine needles we collected. Over the pine needles, the same kind of clay we used for the first plastering of the walls was placed, to form a 5-10cm thick layer. After the clay dried completely, we used the same mixture we had prepared for the interior coating to fix any cracks that formed and make the final finishes. After that dried, we brushed it with waste oil for water insulation. To prevent erosion of the roof, it was covered with reed matting. Ideally, before the end of each summer, the cover should be lifted and the roof wiped with a piece of cloth soaked in the final coating mix. To protect the home from the hot summer sun, the roof window can be covered with reed matting.
15- NAILING THE FLOORING TIMBER:
On the levelled floor, 5x10cm pieces of wood were placed at 50cm intervals, the space in between was filled with earth and trampled, then covered with oak ash against vermin. The flooring timber was then nailed down. It is possible to lay the interior coating mix and leave the floor as earth material instead of using timber.

16- EMBEDDING THE NORTHERN WALL:
The space between The Home’s north wall and the masonry wall behind it was filled with rocks to allow for drainage, then covered with earth and trampled. Thus, the house was protected against the cold coming from the north. Potential dampness was prevented with the rocky drainage. If desired, before the infill, a stovepipe could be placed into the drainage, parallel to the ground, the end 20-30cm above the ground slightly into the house, and both ends covered with a fly screen to prevent vermin from getting in. This way the house could be ventilated with cool air in summer by opening a cover that is placed on the home-end of the pipe.

17- INTERIOR SETTING:
The windows and door were situated according to the winter sunrise and sunset which also guided us when arranging how the interior was to be used. The kitchen counter and sink were positioned to the left of the entrance through the door we positioned to the southwest against the prevailing winds of the valley. This was so that the evening sun shed light on the kitchen counter in front of the western window, providing illumination when preparing dinner. Since no chemical cleaning supplies will be used the wastewater from the sink is plumbed to water the garden. (For alternative or more detailed methods, permaculture and similar systems can be consulted.)

To the right of the kitchen counter, in front of the north wall, a kitchen stove was placed on a platform the same height as the kitchen counter. This makes it more practical for cooking, and The Home’s northern facade that lacks the winter sun will be warmer.

To the right of the kitchen stove a small space was left for firewood storage. To the right of the wood storage, on the northeast facade, a wardrobe-bookshelf was nailed.

The bed was positioned in front of the eastern facade.

The southern facade that gets most of the winter sun was used for a dining table and seating.

To the left of the door a coat rack and shoebox were placed. Musical instruments were hung onto the timber nailed in between the roof poles.

The connections between the roof and the walls were utilized as shelves. Kitchen supplies were put underneath the kitchen counter.

The baby’s cradle was put in the centre of The Home, underneath the top window.
COST:
The house could be built at '0' cost. Due to the close onset of winter and the approaching date of our baby's birth, we were on a tight schedule and could not spare the time to find certain materials in junkyards, so we had to purchase them. We paid about 1000TL for the timber we bought ready to use. The coarse construction of The Home cost 1500TL (850$). In total the interior and exterior everything totalled to 2250TL (1250$).

EPILOGUE:
One could talk about a honest harmony and a sustainable, natural life as long as the awareness and sensitivity felt while building The Home becomes sustainable after one settles in it and goes on living in it. Everyone should establish their own designs in harmony with the natural environment that they are in at that same time as being aware of this mutual consciousness.

This presentation foregoes details and provides solely a general route map. Those who wish to follow this path should do their own research to uncover the details of the secret behind the vast diversity and freedom that a 'natural house with low financial and emotional cost' creates. Today's world presents limitless possibilities for such research. But the essential point is, that the tools of our day have to be reinforced using local and archaic wisdom.
Wishing to live in the kinship
of the same awareness and sensitivity on earth too,
the mutual ‘home’ of all beings..