

on water in nongpho

an inventory of fixtures

on water in nongpho

an inventory of fixtures



Contents

1. Introduction to Groundwater resources

- first steps
- extraction and treatment
- storage and distribution
 - an introduction to the water tower
 - water circulation: the case of the hydrant system

2. Site specific: a case study on Nongpho

- living locally
- water towers in Nongpho (and other fixtures)
- filtered content

3. Contamination and human relations

- the way to contamination
- farming and deprevation
- more on the climate

final words

much thanks to Baan Noorg Collaborative Arts and Culture

During my several walks in Nongpho, I developed an interest for the water system in the village; the structures that serve it actively and the gaps it presents. I immediately noticed the great number of water towers that draw connections above the buildings. I then began to notice many more of



the water related structures that all together make up the system that provides for the community here. Eventually, a tap dripping in the far room of a random house would amuse me. Throughout these walks, I paid attention to potential sources; especially whilst walking along the canal; and outcomes, finding myself peering into the sewers, contemplating the circular pump system that keeps the fish happy in one of the local's front yard, this to the water I consume on a personal level and how it reaches my glass before I ignorantly swig it down. This project aims to recognise and understand the physical contributors and catalysts that lead water from the ground to our taps through a site specific study carried out in the village of Nongpho.

Understanding how things work is a form of emancipation. With a press of a button we can just about achieve anything in our new world. It scares me to acknowledge our progressive loss in ability to sustain ourselves. Basic tools and reflexes are unheard of for the modern being.

On this Jean Baudrillard writes: " Du moment où nous perdons de vue le cheminement de l'énergie, où nous l'éprouvons comme infuse dans l'objet, du moment où nous devenons l'irresponsable bénéficiaire d'une absence de gestes et d'efforts, ne sommes-nous pas justifiées, astreints à croire en une fonctionnalité absolue, sans limites, en la vertu efficace des signes?"

Translation:

"From the moment we lose sight of the path of energy, or experience it as infused in the object, from the moment we become the irresponsible beneficiaries of an absence of gesture and effort, are we not justified, compelled to believe in an absolute, limitless functionality, in the efficient virtue of signs?"

This record looks to understand the water situation in Nongpho by acknowledging the steps involved in the system that serves the community whilst inserting itself into an artistic research project. Therefore, information contained in this document is thoughtfully sourced but could be subject to falsification due to limited resources on the topic and an unqualified author in this specific field, and in general.

Additionally, I was unable to get my hands on any official documents. Indeed, many archive folders were lost when the main office that dealt with these matters changed location. The information I look to provide is solely based on personal observations, various discussions with people who are more or less specialized, and general research about groundwater that I attempted to apply to the specific case of Nongpho.

Do not take this information as the absolute truth, but consider the voids it may present as space to navigate the topic by your own means.

1. Introduction to Groundwater resources

first steps

The main water resource in Nongpho is groundwater. Groundwater is freshwater (from rain, snow or melting ice) that soaks into the soil and is stored in tiny spaces (pores) between rocks and particles of soil. It accounts for a large percentage of the water we consume. It is therefore a privileged resource.

The space where groundwater can move rapidly is known as an aquifer. In an aquifer, there is enough groundwater that it can be pumped to the surface and used for drinking purposes, irrigation, industrial activities, or other uses. For water to move through the rocks located underground, pores or fractures in the rock must be connected. A rock is considered permeable if the connection between pores is insured. Permeability refers to how well a material transmits water. If the pores or fractures are not connected, the rock material cannot transmit water and is therefore not considered an aquifer.

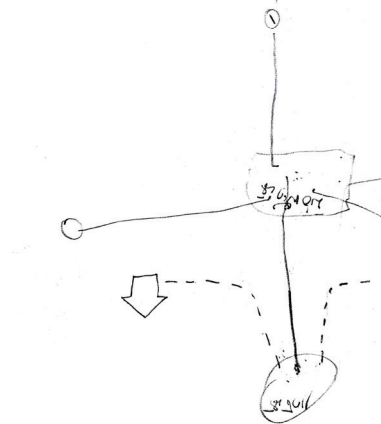
Groundwater is found in two zones. The unsaturated zone, immediately below the land surface, which contains water and air in the open spaces. And the saturated zone, in which all the pores and rock fractures are filled with water. The saturated zone underlies the unsaturated zone. The top of the saturated zone is called the water table.

Aquifers collect water from precipitation that filters through the unsaturated zone. Aquifers can also receive water from the surface like lakes and rivers. When the aquifer is full, and the water table meets ground level, water stored in the aquifer can discharge to the land

surface. This is known as the discharge area.

Recharge areas are where aquifers take in water. Water moves with gravity, going from higher areas of recharge to lower areas of discharge through the saturated zone.

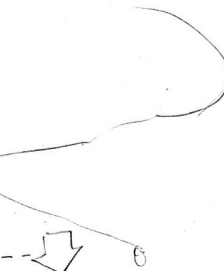
Surface water and groundwater are part of the hydrologic cycle, the constant movement of water above, on, and below the earth's surface. The cycle has no beginning nor end.



extraction and treatment

Groundwater can be held underwater for hundreds of thousands of years, or it can come to the surface filling rivers, streams, lakes, ponds, and wetlands. It can also come to the surface as a spring or be pumped from a well. Both of these are common ways to make groundwater drinkable.

In Nongpho, the water that is pumped from below is led into a concrete storage tank located underground. Naturally, solid particles will sink to the bottom, whilst the "clean" water remains on top. This process is called sedimentation.



There are many pumping wells throughout the village, but only 2 storage tanks. Each well is connected to one of these tanks, or both; drawing a huge pipe network under our feet.

From these storage units the water is directly sent up the water towers in the village, and from there, it goes straight to the houses. Therefore, the only treatment that the water made available for the locals undergoes is that of sedimentation.



distribution and storage

an introduction to the water tower

Water towers are common in flat zones, they mostly serve small towns. A water tower is an elevated tank that stores and distributes water from its summit. The height provides pressure that will eventually drive the water down the tower when needed to send it to an output. The volume of the reservoir and diameter of the pipes provide and sustain flow rate. Typically, a water tower's tank is sized to hold about a day's worth of water for the community served by the tower. So if the pump fails, the tower should still be able to provide for at least a day.

Because of their reliance on gravity, water towers don't require a high electricity consumption and are therefore rather friendly infrastructures. For instance, they are quite common in India where the electricity supply can be erratic.

water circulation: the case of the hydrant

The fire hydrant system consists of an assemblage of pipes located underground that provides water to each hydrant outlet in order for firemen to access water rapidly.

Fire hydrants are connected to the main, so are therefore associated with water intended to be drunk. In cases where there is no water treatment plant for the drinking water supply, the water in the hydrant and the drinking water supply is the same. When there is a separate water treatment plant, drinking and hydrant water are divided.

In Nongpho, there is no treatment plant. However the water from the towers that we drink and the hydrant system do not mix.

Most areas in Ratchaburi province use a hydrant system. A hydrant system passes by Nongpho. Only it hasn't been connected as it is considered incompatible with the dairy farm's activity in the village. For this reason, the people of Nongpho cannot benefit from this system, which is considerably more efficient than the current one.

There is a hydrant head outside of Baan Noorg. Ji once watched the maintenance workers come and clear it. Out shot pure black water.



2. Site specific: a case study on Nongpho

living locally

Nongpho is located in Photharam, in Ratchaburi Province. This is in west-southern Thailand, just before the country tapers leaning into Malaysia. About an hour away from Bangkok, the village is divided by a highway that can only be crossed at three different levels throughout the subdistrict. 1 by foot which involves climbing 2 flights of stairs to then engage in crossing a 1 meter wide bridge above rushing cars in both directions. 2 others for vehicles that lead you below the highway through the means of 2 tunnels in which the circulation is regulated by traffic lights on each side of the road that run until 9pm. After that, they blink in synchrony as a warning to cross slowly, leaving the driver's safety in their own hands. Nongpho is home to 4500-5000 inhabitants, for the most part locals who have lived here for a very long time, raised here and currently raising their respective children in the same houses.

The village is sectioned in "moo"s. Fragmented into smaller villages within Nongpho. There are 10 within the subdistrict.

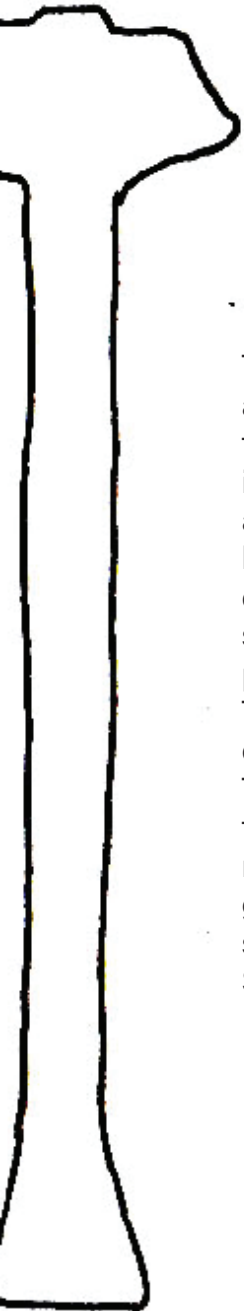
Each sub-district has its own water distribution system. There is no system connected to the provincial system. In moo 7, 8 and 10, water is pumped from the ground directly into the water tower. The municipality uses a separate water distribution system.

Nongpho used to be the coast. It is now a highly exploited land for its sandy ground. Lorries run back and forth, day and night, along the road located on the east side of the village. Sand soil has the smallest ground-water holding capacity.

This village invites those who live here to routined behavior, emphasized by the heat that limits one's energy drastically. The couple of supermarkets act as meeting points, same goes for the two pharmacies. A local market is held every weekday starting around 3pm and into the evening. In the mornings, before 9am stands are also set up selling breakfast, and not so breakfast like foods. There is only one primary school in the village. It becomes a hub for activity at drop-off and pick-up time. The temple is also an active zone, especially as the market is held alongside it. Through the activities that take place here, the village carries a specific rhythm.

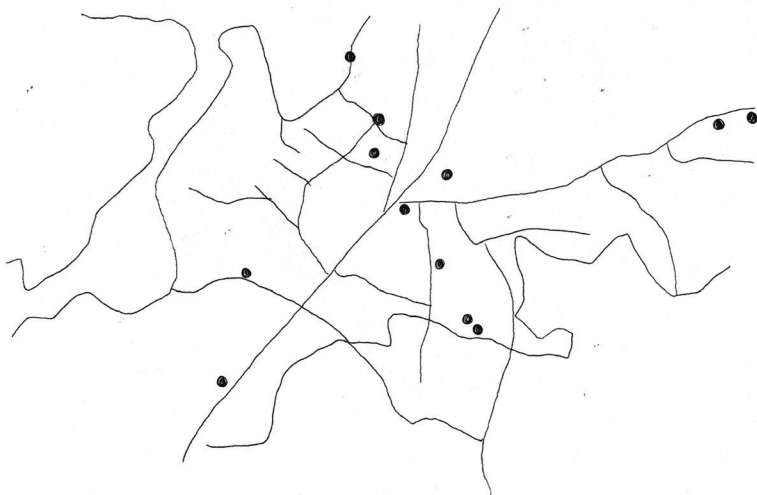
This rhythm is one that the constructions within its borders seem to translate. Firstly, in order to reach the different meeting points, certain routes and passageways are privileged. The tunnels for instance, the two roads parallel to the central highway that connect these tunnels, and then a few on each side of town then run amongst the houses to find my way around. Rapidly, they became icons that I wouldn't miss

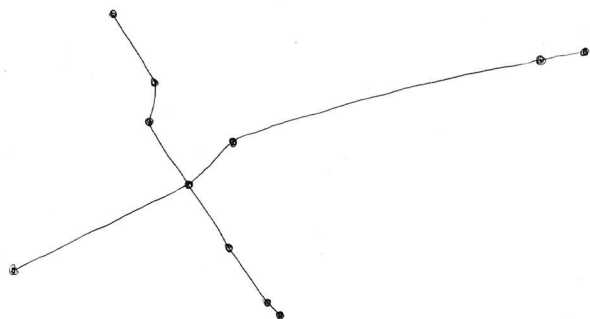
water towers in Nongpho



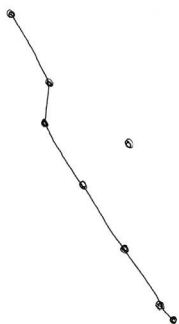
The champagne glass shaped water towers in Nongpho are of a distinct shape. Only their lifespan differs them from the standard water tower, those that we picture in the collective consciousness. I imagine that they are adapted to those they mean to serve. In a village like Nongpho with less than 5000 inhabitants, the demand is fairly low. As the population is low, the storage units don't need to be of excessive sizes. The pressure required to distribute follows this same logic. The towers don't need to be very high to respond to demand. Somehow these towers define the community. They communicate its size through the means of their finely thought out scale. The village's borders seem more perceivable because of them, and we are able to grasp a general sense of how the people inside live, simply by apprehending their water storage system. Something of proximity, and control, for once.

water towers placed on a map of nong pho





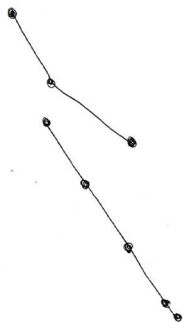
0



6

4

8



6

8





04



05



06



08



09



10



12



13



14



07



11



15

04 13.737623, 99.918046
 05 13.736534, 99.910461
 06 13.747109, 99.914989
 07 13.735363, 99.919488
 08 13.742957, 99.915507
 09 13.741750, 99.915480
 10 13.743525, 99.928497
 11 13.739476, 99.927109
 12 13.739792, 99.916611
 13 13.743564, 99.930268
 14 13.738565, 99.930257
 15 13.732758, 99.909543

ACCESS TUBE

empty ☒
not full tank
 $\approx 1 \text{ m}^2$



THE AVERAGE WATER TOWER IN NONGAO

125 ft 1000 gallons/min
93 ft 414 gallons/min

STORAGE CAPACITY

$$11 \times 212 = 2352 \text{ m}^2$$

$$2,06 \times 6,31 = 8,87 \text{ m}^2$$

$$11,3 \times 1,3 = 1,69 \text{ m}^2$$

each foot of height 7,18 m
provides 10,43 PSI
(pounds per square inch) $\frac{1}{6} \text{ m}^2$
of pressure

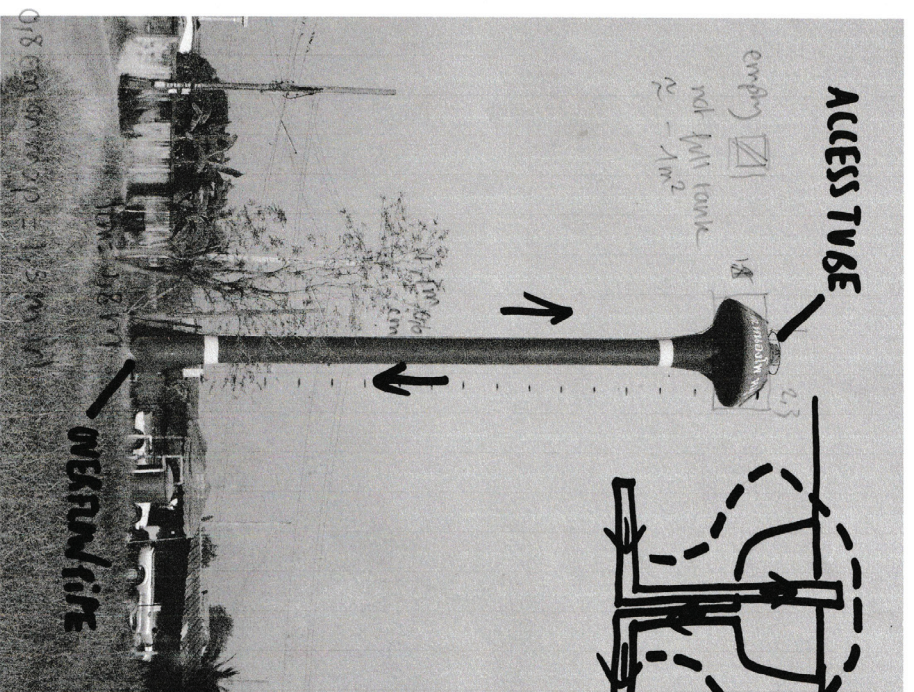
$\approx 6 \text{ m}^2$

$1,5 \times 19 = 28,5 \text{ m}$
 $28,5 \text{ m} = 93,5 \text{ Ft}$



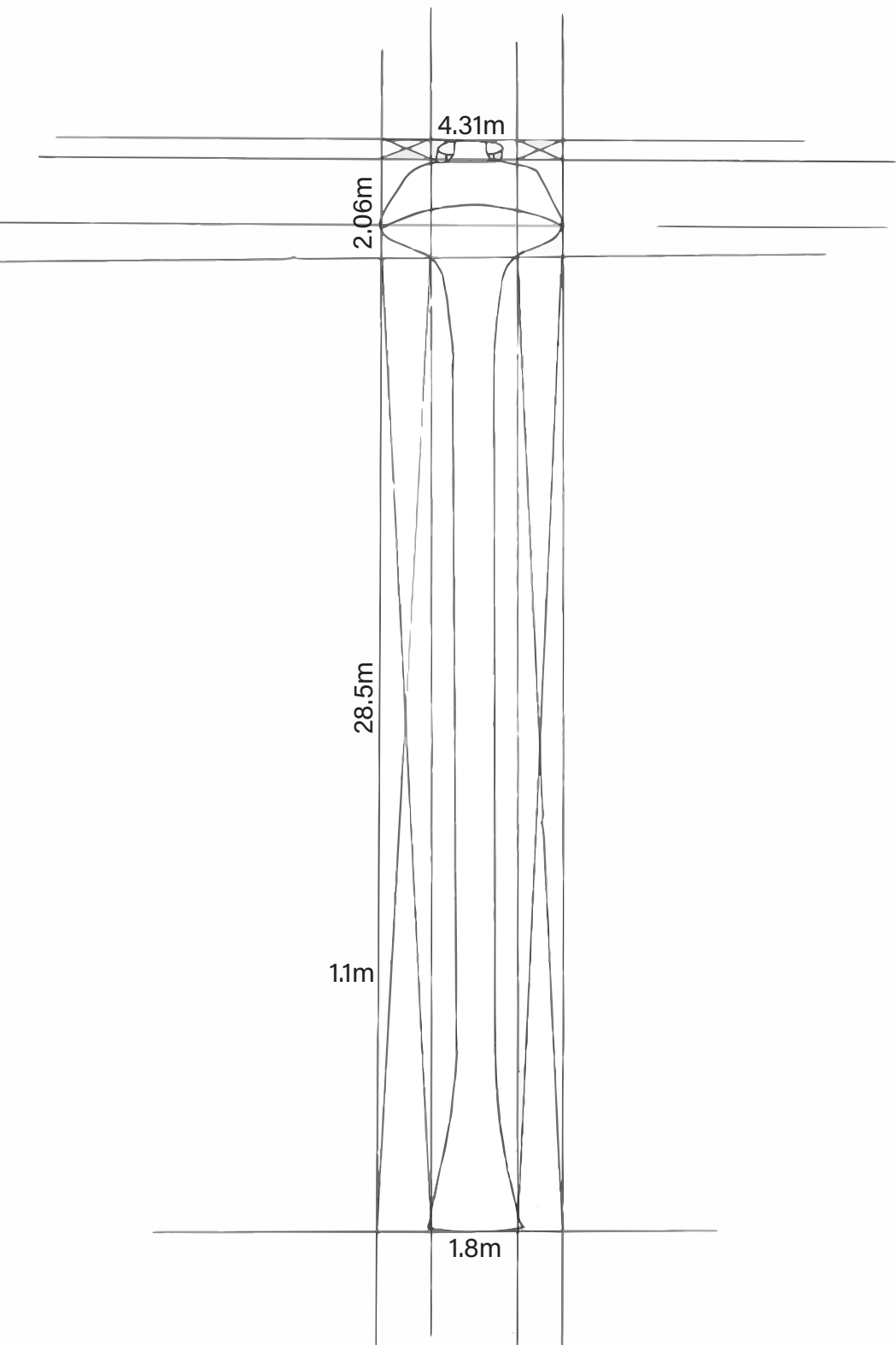
$93,5 \times 0,43 = 40,2 \text{ PSI}$

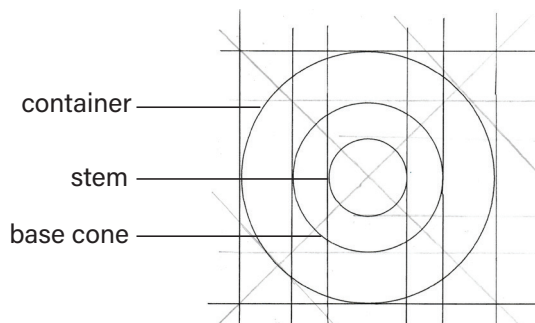
0,8	1,1	2,3	0,7
1,5	2,06	4,51	1,3

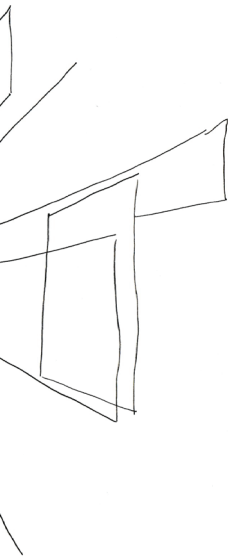


estimate numbers:

height	28.5m = 93.ft
pressure	40.5PSI
storage capacity	6m2







The concept of a village is of interest to me. A village is a place within a space. Places exist because of humans and their tendency to apply physical definition to their surroundings. Some kind of undefeatable need to divide. A village is the extension of a house. In a house there are rooms, and in each room drawers, closets, cupboards. The house itself mimics the human body. Walls act as skin, structural components like bones, and the furniture inside is like organs.

A town is the extension of a village. A city the extension of a town. The bigger it gets, the more we feel the need to restrain it, for control reasons I'd imagine. Therefore, within a city we will find a separation system, different from one city to another but essentially acting in the same ways. In Bangkok, there are 50 districts. Here in Nongpho, there are 10 moos. This is never ending, I'll tease you by evoking countries, continents, planets and galaxies.



filtered content

One water tower in particular surpasses all the others by its considerable size and developed structure. It is located behind the middle school a little way down the road. It provides for all of the filtering stations that have newly been installed all across the village. As a hub that structures the network by centralizing the storage. These filtering stations are one of those that cadence a day in Nongpho. Locals gather on a regular basis around these machines, equipped with a series of containers waiting to be filled up with gallons of water. They come by all means. If by motorcycle, they are limited in how much they can carry. Same on foot, only they can come in larger numbers. Others will attach a trailer to the side of their bike that will hold many containers. I've never seen a car stopped in front of one of these stations. It must happen, only I'd imagine when passing rather than taking the car especially to fill up. Based on observations, this must mean they are placed strategically, polarizing the movements around, drawing them to their center.



16 13.735209, 99.919508





There is something sacred yet corrupt about these stations. As they provide a necessary resource for entire families that is said to be safe to drink, many questions can be raised as to their ability to properly clean the water they dispense. These are also fairly new structures, their efficiency hasn't been proved through time.

I asked a local plumber about the quality of the water in the filtering stations that are meant to provide drinkable water. He responded: "Clean, but can I drink it? I'm not quite sure I can drink it. Because it is pumped from the groundwater and just stays in the pond to settle." Coming from one of the best equipped people to talk about this matter in the village, as exposed to the system on a daily basis, this answer is quite interesting if related to reflections on functionality, especially considering the subject matter as water, a primary resource and need. He later called to correct this answer, however this being his initial response, I believe we can still take it into account. To another question, he answered: "Water used in municipal areas is good, I think. (Although there is limestone)": Hesitant.

Indeed, the filtering is assured directly by these machines. Factually, the treatment is therefore a one step process, that begins as one slides a baht into the machine and ends as the water is already filling the bottles he or she will be drinking out of for however long the reserve lasts. No check-up is carried out when someone helps themselves at these stations, from one person to another bacteria could enter, contaminating the next batch of water to come out. On top of this, the level of efficiency required by a machine that treats unsanitary water to make it drinkable is of very high standard. Do these machines meet this standard? Does one and not another?

Water is taken to be analyzed at Kamphaeng Saen College every year. In the meantime, plumbers are assigned various locations to control on a daily basis. Morning, noon and night. The maintenance being realized by the consumers themselves, regardless of the fact that it is their job is quite precious also. Caring for what will later care for them, and others. They act like gardeners, only instead of growing potatoes they ensure the well being of water. Come to think about it, this is a common pattern in Nongpho. Between the dairy farms that provide milk for the community, the locally grown fruits and vegetables that we can buy at the market, and the many trees from which we can directly pick berries or eat the leaves, there is something very internal about this village. Domestic.



However, as the plumbers who carry out these daily check ups have no documents to comply with (as I mentioned, they were lost in the move), they have to complete this examination based solely on their personal knowledge of the water system. So check-ups are carried out but who's to say they are reliable. Especially when the only official document deriving from them is a photo of a couple of guys standing in front of these machines, with their thumbs pointing upwards. No encrypted data as proof of a valid verification.

Those who refuse to put their trust in the filtering stations, turn to buying bottled water at the supermarket. Further, most drinks are sold in plastic disposable cups, along with a plastic straw. Soups are packed in plastic bags tied with a rubber band. If you are looking for a quick snack, you will end up with more plastic than actual food. A 20cm by 20cm card box with a plastic lining for a foursome of 2cm egg buns. Approximately 2 million tons of plastic waste are generated every year in Thailand with only 500 000 tons being properly managed. Being so cheap and easily disposable on an individual level, plastic is a privileged material serving so many purposes. It is the symbol of our throwaway culture.

Single use and object apprehension. How does provisionality affect the way we consider objects?

Notes on preciousity and value.

When you go to use an object that you know will expire the minute you've completed your action, how do you apprehend its material reality and, moreover, spiritual one? Sucking the life out of a plastic bottle as you attempt to draw the final drops of water to your mouth. When it comes to plastic bottles, often I hold on to them for some time. As I finish its content I will look at it for a while, contemplating my next move. Generally, I will fill it up again to ignore the two sided question that follows. Shall I throw it away or shall I keep it? When I hang on to it, and then as this becomes rather repetitive, they will end up accumulating and rolling under my bed at night, tipping over on the high shelf where I forget their existence. I will find them all at once when I'm made to clean (deeply) and at this moment I won't think twice about throwing them all away. As if by

keeping them, I'm attempting to give their existence more consequence by expanding it and wearing the bottle out, not by solely emptying it but by letting some dust build up on it. Throwing away new objects doesn't feel right. Throwing away one that appears to be old, whether because of dirt or smell, is more acceptable.

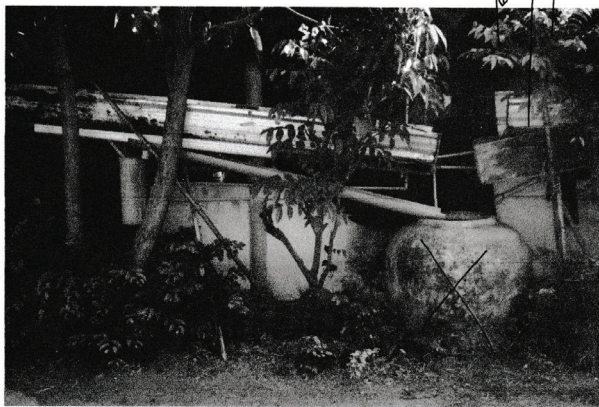
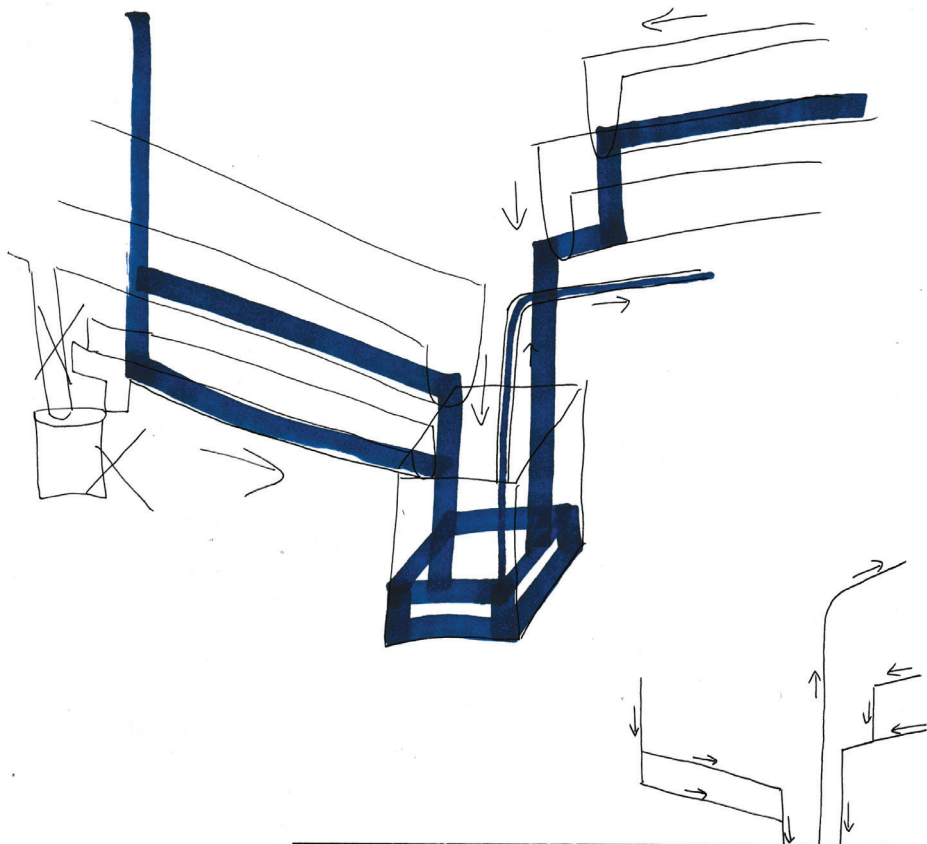
Another way of manipulating the ephemeral is through complete carelessness. Knowing that this bottle has only one life, and that from the moment you purchase it, this life is yours will lead to a feeling of possessiveness. We love possessing because we love power. In this case, one will gulp down the entire content of this bottle in less than a minute, spinning it above their mouth to create a funnel shape to ease the flow. When done, they will crush it in their bare hands and probably throw it on the floor. We are very radical, must I point out. We like to crush things. Beer cans never avoid being folded once emptied, bags of crisps are to be opened with a clap of hands, madeleine's by squeezing the plastic on one side bursting open the other with built up air pressure. A feeling of unconditional strength, that manifests itself through the completed action and the celebratory noise that accompanies its success. The crunch of the aluminum, the bang of the crisp packet, the pop of the madeleine wrap.

Water is the absolute ephemeral in our eyes. Its clearness gives it a sense of non-existence, and the movement it follows something unceasing. Often, I'm only aware of how much I'm using as it comes out of whatever outlet, but rarely do I think about where it goes after. It escapes me, as I imagine it escapes most of us. It cancels itself out, disappearing into the depth of whatever drain, or drying on flat land, evaporating in the sky or sinking into the soil.

I wonder if the behavior of natural substances affects the way we apprehend that of human creations. If water can disappear without a trace, so can plastic. Wind will blow, when it stops it's as if it was never there. Fire will eradicate the matter it's burning before vanishing itself.

The pvc tubes that are used for water works are blue in Thailand. Impossible to miss them whether lining the walls of one's house, or running along the fence throughout the garden. This visibility pushes us to recognize their paths, get a sense of where the water that alimnts our houses comes from, and further, acknowledge the simple existence of a higher system and the succession of efforts. Hose pipes are also blue.

They are highly distributed, available in many stores from building outlets to local convenience stores. This means that individuals will buy the tubes themselves to then go ahead and assemble them to their liking, and needs. I enjoy analyzing the uses they will find for them, besides enclosing the water flow in the yard. They are used as gutters, drains, fencing, even scaffolding; strung together with rope and covered with a huge vinyl sheet. I believe the analysis of makeshift solutions is a way to better understand human psychology. Instant responses to urgent problems. In Thailand, temporary solutions aren't so temporary. They let in a sense of humanity, revealing hesitation and reactivity.







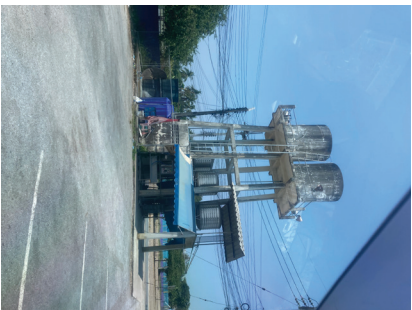












3. Contamination and human relations

a way to contamination

When the surface water that recharges an aquifer is polluted, the groundwater will simultaneously become contaminated. Contaminated groundwater can then affect the quality of surface water at discharge areas. Groundwater can become contaminated when hazardous substances soak down through the soil into groundwater. Some substances dissolve very slowly in water. When these substances seep into groundwater faster than they can dissolve, some of the contaminants will stay in liquid form lingering in the water destined to be extracted for drinking.

A plume forms if there is a continuous source of contamination entering moving groundwater.

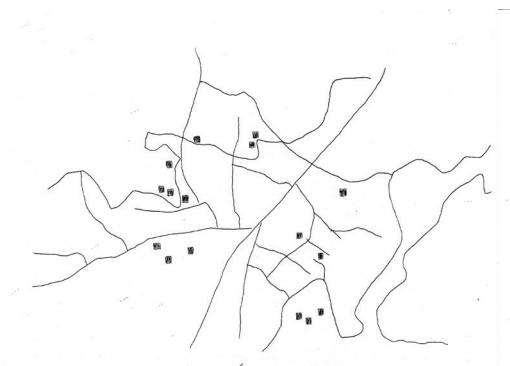
farming and deprevation

Nongpho is renowned for its many dairy farms. There are ..throughout the subdistrict.

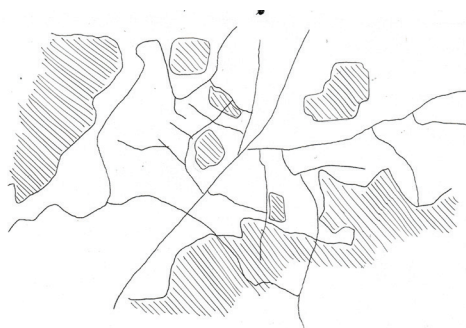
age helps provide for many locals, as well as producing milk and milk based products for a large number of customers in Ratchaburi province. This being said, these same dairy farms considerably affect the water system here. As mentioned before, they are one of the reasons Nongpho has not been equipped with a highly functioning hydrant system, and deals on a daily basis with one that presents many flaws.

I may be going against the plumber's words here, but based on external research animal farming has proven to be an important factor in groundwater contamination, so I judge it relevant in the case of this study.





dairy farms as squares



green areas hashed



They act by contamination. Nitrates and phosphorus are harmful nutrients produced by dairy farming. Both are found in cow urine and manure. They are unsafe for humans making the water they penetrate hazardous for consumption.

On top of this, they disturb the natural ecosystem. Nitrate's presence in water when in large amounts can stimulate toxic algal growth, where algae will bloom in large amounts over rivers, absorbing all the oxygen in the water whilst suffocating the life beneath.

Hyacinth are very common in these areas and cover almost the entire water surface of the canal. These aquatic plants mutate very fast, absorbing, like algae, important quantities of oxygen. They were first imported by King Rama V from Indonesia in 1901 for decorative reasons, however they spread at an extreme rate and rapidly got out of control. Hyacinth is used to feed porc.





more on the climate

Further, making space for farming land requires tempering with the earth, especially through deforestation. I don't know about this in Nongpho specifically. This intervention makes the soil in farms loose and therefore prone to weather erosion. This leads to heaps of earth sliding into nearby rivers whilst the rest accumulates on the river bed, destroying plants and ecosystems.

The removal of trees has a significant impact on the hydrologic cycle. Indeed, we rely on trees to pull water back into the atmosphere as vapor through pores in their leaves in a process called transpiration, therefore feeding rain clouds in order to create precipitation. Without rain, the soil wouldn't have new water to absorb. Therefore, the quantity available for extraction would know an end, and we would be in trouble.

On a related note, groundwater levels are significantly affected by climate change. The instability it creates causes flooding and droughts. On top of that, Thailand has a wet and dry season. Groundwater levels are dependent on recharge from the infiltration of precipitation, so when a drought hits the land surface it heavily impacts the water levels below the ground. Moreover, the existing water is lost from the soil by evaporation from the soil surface and by transpiration from the leaves of plants.

Until only ten years ago, people were allowed to extract water from underground by their own means, independently from a higher system. This was forbidden because of an important decrease of the ground level.

This remains an issue in Jakarta still to this day. Every year they lose 1-2 cm. The city is slowly sinking into the ground.

On the contrary, during the rain season, water levels rise and the incoming precipitation often becomes unmanageable.



28/02/2024 or 2567

Over the past few days in Nongpho, diggers have been taking over part of the road as they work towards expanding the ditches on the side of the highway. Many plants grow in these trenches within the water that renders the surface flat.

I asked about this intervention, I learnt that an important storm is scheduled during March, in about a month from now. They are preparing their role as receptors to prevent flooding. As they widen the trench, they are not only making space for rainfall but also removing the vegetation that currently holds up the













final words

I feel acquisitive in almost everything I do as the subjects I choose to study are generally out of my hands to start with. Working on objective matters is difficult to navigate, without stepping out of the safe zone. But when does a question of safety turn to one of overstepping? When does interest become appropriation? And when should one keep things to themselves, and when to broadcast those same things?

One recurring topic in my work is that of possession, taken from a very broad angle as applied to human behavior in relation to location. How one occupies their stay in this world for the 80 approximate years (if unlucky) that they are given. For the most part, they will lead the most destructive of lives. And to look at human activity as a whole, it is disastrous.

As a result of our failure as humans, we look to find stability in the mess we have created. Definition in one way. Separation systems are present on every level of the inhabited space. I mentioned land locking before with countries, cities, villages and houses. Roads, buildings, containers follow the same logic. From the moment it knows an outline, some sort of enclosure, it participates in definition. Something as simple as a fork can be considered an image of definition. Its physical presence establishes the separation required to define.

Division isn't only the result of human behavior. Nature also knows division. The trunk of a tree presents itself as an insurmountable frontier. The fine outline of a leaf enhances its physical reality. Even the ocean finds

its end as it meets the horizon. Division can also be psychological. The human brain itself is divided into lobes. And thoughts come organized, more or less depending on the person.

These ideas were guidelines to this project. The containers and the contained. The movement within or the inertness of the internal substance. The voids that allow the movement, and the barriers that restrain it. The various structures composing the water system in Nongpho came to me as representations of these conducts.

Physical creations are psychological manifestations. They are the result of our brain and body. I picture the water system as a network of its own, a sub network following that of humans and their activity. Its parallel existence below the ground only enhances this complicity. As the roads trace directives on the surface, the pipes follow this same path below. Electrical wires do so above. The water towers are living proof of the track that pipes abide by. They act in the same way as the human heart, pulling liquid in and rejecting it out. In this case, pipes replace veins.

Even though we are prone to definition as established, that we proceed to accomplish through separating; we somehow are incapable of acknowledging it. We have reached a stage of complete disregard to how this separation operates, ignoring the steps it involves, those that give results to actions. Through the realization of this project, I was forced to notice the divided and the connections that bring them together. I began to recognize effort in a different way and apprehend the gestures and actions I would complete as contributors. Maybe not contributors but as an active recipient, a slightly more aware recipient.

I became an active component in the system. I wish this was true.

I spent a total of three months living in Nongpho. During this time, I became, to a certain extent, a part of the community by adjusting to the shared routines and daily rituals, following the consumption tendencies, and going along with the ways of getting around, even attempting to conform to the language and general communication.

This being said, I was still (and am, as I am writing this two months in) a stranger and felt like I was floating for the most part. Fixating on very concrete matters such as a legit study of the water system was a way for me to be grounded again.

However, leading a study on a system that doesn't affect my living, that doesn't in any way belong to me and worse, pointing out its flaws felt very wrong. I hated myself for the position I held throughout the making of this project, and still now as I am writing this final paragraph, I am hesitant of what to do with it. I want to scrap it, if you are reading this, somehow it escaped the bin.

Be sure to carefully recycle its physical matter and kindly read from a distance to preserve free thinking.