## graduation research & design book Embrace diversity: (un)divided Hebron coexistence through architecture of water

klaas johannes de jong 13th of April 2018





#### graduation research & design book

author: Klaas Johannes de Jong final version: Klaas Johannes de Jong April 13th, 2018

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design tutor:
research tutor:
building technology tutor:
delegate of board of examiners

ir. Henri van Bennekom
prof. dr. ing. Carola Hein
ir. Hubert van der Meel
ir. Daan Vitner

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contents

## research

Embrace diversity: (un)divided Hebron
TEMPLE OF WATER

## Israeli-Palestinian context

## introduction

No matter if you are in what may be recognized as the State of Israel or within the borders of the Palestinian Territories, the society and its visitors notice inclusiveness, exclusiveness, and seclusiveness explicitly.

Along the Green Line Israel states that no Palestinian car may enter Israeli land. At the exits of 'B- or C-areas' within Palestine, that lead to Palestinian towns and/or villages ('A-areas'), large red signs are placed, notifying in Hebrew, Arabic and English that Israeli are forbidden by Israeli Law to enter the exit.

The inclusiveness, exclusiveness, and seclusiveness visibly translate the region into a highly segregated society, in which the groups of people antagonize each other.

Since the rise of nationalism in the early beginnings of the Jews coming to the Land of Israel – from the Arabs holding on to their land, and from the Zionist movement of returning to the 'Promised Land', which went together with warfare between the Arabs and Zionists, a highly segregated society was created, in which both groups mistrust and misunderstand each other.

As a reaction to the mistrust and misunderstanding, both defensive as well as offensive strategies were applied for the sake of protectionism by the Israeli and the Palestinians.

The region around the Jordan River Basin faces water scarcity and water allocation problems, due to politics and natural conditions. Even though the water sources are scarce and water is relatively expensive, the much water required agriculture is subsidized by the Israeli government for the Israeli farmers. Mostly Palestinian cities and villages are limited in the water supply through the system of territorial water

management – headed by the Israeli. Desalination comes at a price and due to drought and water subtraction from the Jordan River, the Dead Sea water level is declining by a velocity of one meter per year – a tremendous speed.

The problems with water scarcity, territorial water management and its side effects counteract towards the peacemaking at the political level. Peacemaking internally is threatened by internal forces and society. The problems are a major source and example for the mistrust and misunderstanding between the Israeli and the Palestinians at the level of individual citizens.

The allocation of water, the limited availability to water and its inequality functions as a system that divides society more than only the Separation Barrier is capable of, as it influences the people directly in their daily life.

From my opinion, the problems of water should be handled in such way that the mistrust and misunderstanding will be taken away from society, as this is a major problem or threshold in the Israeli-Palestinian peacemaking. As water is a major source for the societal problems, it is one of the themes that should be addressed in the process of peacemaking. In order to be able to achieve peace between Israel and the Palestinian Territories, societal problems should be solved by attacking the water problems.

This research book gives an extensive overview of the context of Israel and the Palestinian Territories - in relation to the conflict and the peacemaking between the entities and their societies.



Bethlehem \*

The research is divided by main themes that shape the book into the main chapters - followed by research conclusions.

The first chapter captures the cultural aspects of the Israeli-Palestinian context throughout time.

Afterwards, demographics of the Israeli and the Palestinians is discussed to understand the society through its individual people and collectives.

The third chapter focuses on the highest level in the hierarchy of power - the politics of Israel and of the Palestinian Territories.

Following, the economy as part of the Israeli-Palestinian context is visualized in key aspects. A major part of the economy is dedicated to the agriculture as part of sustaining the situation as it is.

The next chapter extensively informs about the water situation on the societal and territorial level - both nationally and internationally.

At last, the infrastructure in the region is discussed at the level of mobility and transport of people, goods and utilities, and the construction and effects of Israeli settlements.

Through exemplary icons and diagrammatic visualizations the information is summarized clearly and visually, assisted by text fragments.

## Topography, history and geography

## introduction

The location of Israel and the Palestinian Territories is East of the Mediterranean Sea, at the start of 'the Middle East'. The region is enclosed by the Mediterranean Sea, Lake Tiberias, the Jordan River, the Dead Sea and the Red Sea.

Historically, the region belongs to world's longest inhabited continuously places, together with the parts of e.g. Lebanon, Syria, Jordan, Egypt. The territory of Israel and the Palestinian Territories have been inhabited by many kinds and groups of people. Borders in the region have changed often; ownership and control of many areas have been disputed many times.

Lots of sites have their history in the three monotheïstic or Abrahamistic religions: Judaism, Islam and Christianity. Israel as the Jewish State is surrounded by Muslim states

Throughout history, Jews always had small settlements in the region around their holiest sites, Jerusalem and Hebron. Under the Ottoman Rule, Jews were welcome in the region to settle. After the fall of the Ottoman Empire, the area of what we nowadays know as Israel, the Palestinian Territories and Jordan became under the British Mandate.

Fleeing Jews as consequence of the Second World War inhabited 'Palestine' with growing numbers, which was called the Zionist movement: The rehabition of the Land of Israel by Jews.

The Jews in 'Palestine' under the British Mandate – as a minority amongst a majority of Arabs – settled according a non-territorial system, in which the two groups could live together in socio-spatially separated land and towns.

David Ben-Gurion declared the State of Israel independent in 1948. From this moment on, security, population dispersion and social integration were the three important key themes of the State, to be achieved by the creation of development towns and regions, and convert the pre-state non-territorial settlement system into a territorial system. As a result, the social integration failed and led to friction and inequality between the Zionists and Palestinians. Nationalism and both sides, Zionists and Palestinians grew due to the fact of protecting their own land and resources during the Arab-Israeli War of 1949.

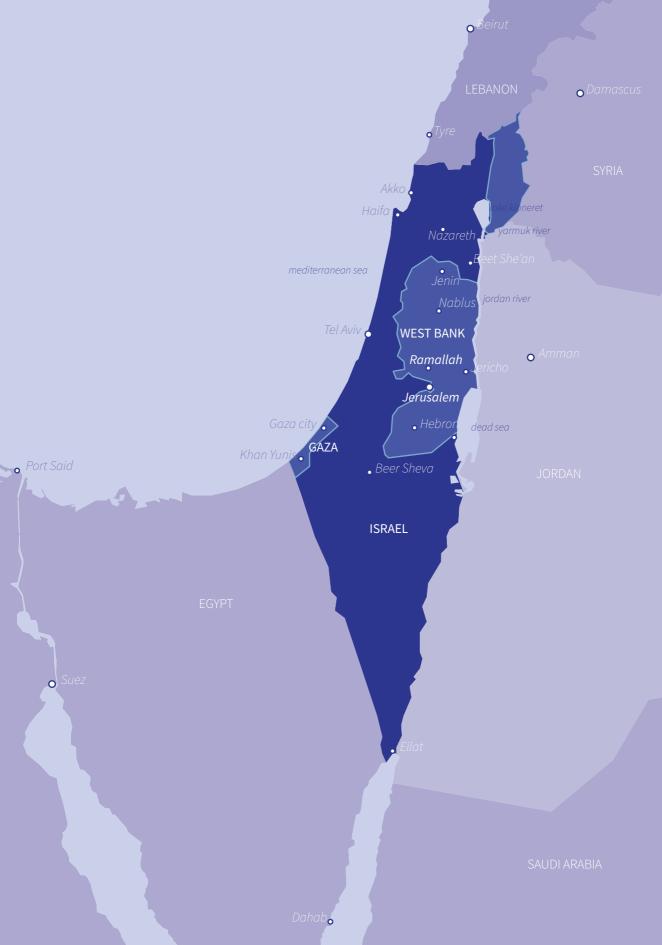
After disconnecting Israeli access to the Red Sea by surrounding Arab countries, Israel surprised all surrounding countries by an attack. During the Six-Day War, Israel doubled its territory by fourfold, it occupied the Sinai Peninsula, the West Bank and the Golan Heights. Despite the Yom Kippur War, the invasion of Arab countries into Israeli territory, Israel stood strong.

At the Camp David conversations, Israel and Egypt agreed upon peace, and Israel left the Sinai Peninsula in steps as a return.

The Golan Height and West Bank are occupied by Israel ever since. Jerusalem was declared by Israel as its capital city, although this is not recognized by any country or international institution. Palestinians did not agree with this. The First Palestinian uprising (Intifada) took place in 1987.

At the 1993 Oslo conversations, Arafat and Peres agreed upon the creation of the Palestinian Authority as the rule over the Palestinian Territories, in which the West Bank is divided in control areas A. B and C.

After the Second Intifada in 2000, Israel started the construction of the West Bank barrier. Since the year 2005, Israel disengaged from the Gaza Strip. Apart from minor terrorist incidents, the situation in Israel and the Palestinian Territories has not changed ever since.



## culture research

## The land of many

## culture



The land of Israel and the Palestinian Territories. The land which is home to the three most important monotheistic religions in the world - Judaism, Christianism and Islam.

Jerusalem - which is claimed to be the capital of both Israel and the Palestinian Territories - is one of the longest continuously inhabited cities in the world. The history of Jerusalem, and the region around it is extremely large. Besides, many people and groups of people have seen the area as their home, which is the source of the extensive, and moreover, complex history.

Israel (and the area of the Palestinian Territories) is seen as the home and birth place of falafel and shakshuka.

The land is described in the Bible as 'The Land of Milk and Honey', defining it as a fertile place for flora and fauna - which became a major starting point for the Zionist movement of the Jews.

Israel and the Palestinian Territories are home to the holiest places of Jews, Christians and Muslims. The Old City of Jerusalem houses the Church of the Holy Sepulchre, the holiest place for Christians. The Western Wall is the holiest place for Jews, and the Table Mountain with its mosque the second holiest place for Muslims.

Hebron has the Cave of Patriarchs and the Mosque Al-Ibrahim, the burial place of Abraham according Jews and Muslims. It also is the second holiest place for Jews.



Western Wall/Table Mountain, Jerusalem ≈

Besides physical and territorial heritage of Israel and the Palestinian Territories, both the Israeli and Palestinians have a long history of knowledge, craftmanship and traditions.

Israel is world exporter of diamonds and attorneys. Palestinians have a long tradition of clothmaking and the craftmanship of soaps.

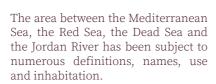
The culture chapter will take a route through the most important key specifications of the culture of the Israeli-Palestinian society.

Through showcasing the information of the following pages, the cultural context within Israel and the Palestinian Territories will be explained and serves as a base for understanding the culture.

'HISTORIC
PALESTINE'
IS A HEAVILY
CONTESTED
AREA; HOLY FOR
FOLLOWERS OF
THE THREE MOST
IMPORTANT
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RELIGIONS IN
THE WORLD.

### **Nationalism**

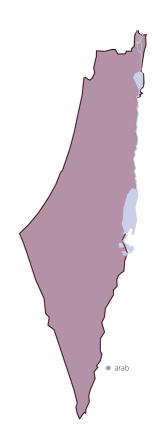
## border fluency



Nationalism is a major aspect of both Israeli and Palestinians, respectively to be called as Zionism and Palestinianism. To understand this aspect, the history of the nationalism translated to borders is important to be studied.

The next pages chronologically demonstrate the changes that the Israeli-Palestinian borders have gone through in the last 100 years. Not only the real change in borders is shown, also the proposals made by influential people and experts are shown within the timeline.

The proposal in relation to the real changes that happened in history, show whether the plans were influential to the negotiations or not.

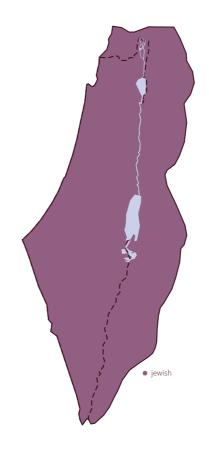


#### PRE20THCENTURYPALESTINE

In the early years of the 20th Century, the land between the Mediterranean Sea and the Jordan River was part of the Ottoman Empire, and was inhabited by mostly Arabs.

Not only Arabs inhabited 'Palestine', but there was no presence of significant colonies or enclaves of other people.





#### PRE1947JEWISHPRESENCE

Slowly, Jewish people immigrated into Palestine, and created independent settlements. The Jews settled mostly alond the Mediterranean coastline and in the North around Lake Kinneret and the Jordan River Basin.

As both the Jews and Arabs lived independent from each other, and since the population density was low, the people lived next to each other without significant problems.

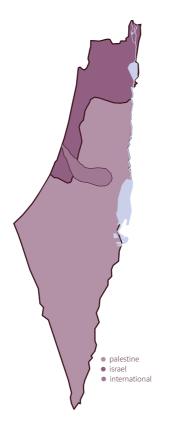
Especially after the Second World War, Jews from Europe immigrated to Palestine to found a safe country, a safe Jewish State - the start of the Zionist movement and the uprise of Palestinianism.

#### 1919 JEW PARTITION PLAN

The Jews did see their home as a larger territory than only at the Western side of the Jordan River. The Jews proposed a plan to define the Jewish State around the Jordan River, into Lebanon, Syria, Jordan and the complete territory of Palestine. Palestinians would have to move Eastwards into Jordan, which was called Transjordan at the time it was under the British Mandate.

This partition plan was blocked internationally.

## border fluency





#### 1937 PEEL PARTITION PLAN

Due to the Jewish presence, the Peel Commission proposed a plan to partition the land into three territories

The land which was inhabited by the Jewish colonies would be Israel, the other part Palestine. The region around Jerusalem would be international, as this is the holy place for both the Muslims as the Jews, respectively the Arabs and the Israeli.

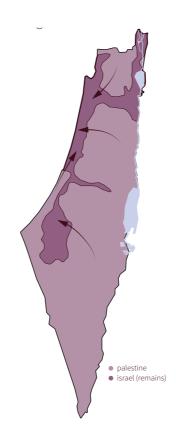
The plan was blocked, as Palestinians did not want to loose territory.

#### 1947 UN PARTITION PLAN

As the land partition between the Jews and Arabs became an international matter after the large immigration flows after the Second World War, the UN proposed a land partition plan in 1947. The mostly inhabited places of each group were assigned to that group, leaving intersecting lines of both territories, so that people could cross from one cluster to another. Jerusalem was assigned to be part of an international area.

The part was blocked by the Palestinians, as it would take away too much territory from them.





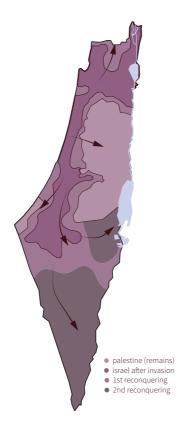
#### 19482NDBERNADOTTEPLAN

In 1948, Israeli Bernadotte proposed a land partition plan that looks a lot like the 1937 Peel Commission partition plan. Bernadotte was killed by ultra-right Israeli, as it would leave a territory too small for Israeli.

#### 1948 ARAB INVASION

Reacting onto the Declaration of Independence of the State of Israel, the Palestinians and Arabs from surrounding Arab countries invaded the 'Israeli grounds' in June 1948. The Israeli people were pushed back to the coastline along the Mediterranean Sea, while the Arabs possessed almost all territory.

## border fluency





#### 1948 ISRAELI RESISTANCE

The Israeli counterattacked the Arab invasion in July 1948. The Israeli conquered as much land as it possesses right now. Through this strong counterattack, the Gaza Strip was minimalized, the West Bank shrinked, and the Israeli now reached into the Negev Desert until Eilat, having access to the Red Sea.

#### 1949 LAND PARTITION

The 1948 Arab-Israeli War caused new negotiations at the drawing table. A line was drawn that would withhold the West Bank, closed for Israeli. This 'Green Line' visualized two new entities in a straight translation, Israel outside, Palestine inside. The new lines or borders, as the consequence of the Arab-Israeli War, divide the territory into 77% of its territory Israeli.



#### 1967 SIX-DAY WAR

Surprising the Arab states, Israel attacked outwards at all of its borders, to occupy the Golan Heights at the Syrian Border, the West Bank, and the Sinai Peninsula from Egypt. As a reaction to the blockade of the Suez Canal and Red Sea to Israel, the Israeli fought and conquered land four times as big in only 6 days.

#### 1967ALLONPARTITIONPLAN

In 1967, Israeli minister Allon proposed his land partition plan as part of the peace making process. The Territory along the Jordan River would be annexed to Israeli, leaving one trace of Palestinian Territory to move freely from the West Bank to Jordan. The West Bank would be divided in two bubbles of Palestinian Land, connected by a Palestinian connection road. The part of the Gaza Strip bordering Egypt would be annexed to Israel, and the upper part would remain Palestinian - also connected to the Southern West Bank part of Palestine by Palestinian connection road. The Palestinian stretch to Jordan would be crossed by Israeli by a Israeli connection road. The Palestinians blocked the plan.

## border fluency



#### 1974ISRAELIPEACEEFFORT

Egypt fought hard against the occupation of the Sinai Peninsula. As an effort for peace during the negotiations, Israel withdrew slowly from the Sinai Peninsula, back to its original borders.

#### 1978 1ST CAMP DAVID PLAN

The Israeli-Egyptian peace process went uplift after the start of the Israeli withdrawal from the Sinai Peninsula. Together with Clinton from the United States, at Camp David new plans were drawn. The first proposal concluded the West Bank being divided in three loose parts, surrounded by Israeli security zones and settlement blocs. In the proposal, Israel would have to withdraw fully from the Sinai Peninsula.

The Palestinians blocked the first Camp David proposal.



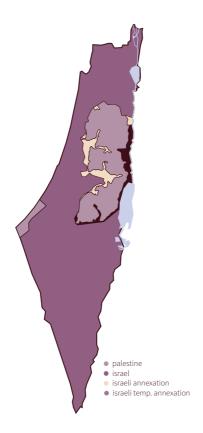
#### 1978 CAMP DAVIDACCORDS

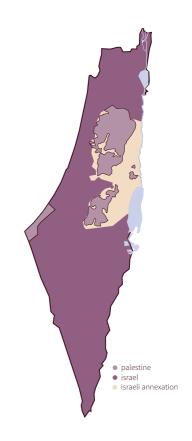
The final proposal of the Camp David negotiations was accepted by all parties - although the map was never drawn during the negotiations. A later reconstruction of the Camp David Accords visualizes that parts of the West Bank with Israeli settlements would be annexed to Israel. The West Bank remained one shape, but Israel controlled the security border at the Jordan border close to Jerusalem. The Israeli had to withdraw fully from the Sinai Peninsula.

### 1980/82ISRAELIWITHDRAWAL

As a result of the Camp David Accords, the Israeli withdrew itself from the Sinai Peninsula in steps, until it was under full Egyptian control again in 1982.

## border fluency





#### 2000BARAKPARTITIONPLAN

At the time that Barak was prime minister of the State of Israel, he also tried to be part of the peace process in the Israeli-Palestinian conflict. Barak's proposal concludes Israeli annexation of the settlements areas at the West side of the West Bank, while the Eastern settlements would be under temporary Israeli control, before having the area joined together with the remaining West Bank.

As the Palestinians found that they would loose too much territory, the plan was blocked and thrown away.

#### 2004SHARONPARTITIONPLAN

Ariel Sharon, prime minister of Israel from 2002 till 2006, was also infamous as Ariel 'the bulldozer' Sharon, because of its actions at the West Bank territory.

Sharon claimed the major part of the West Bank territory to be annexed to Israel, leaving only smaller Palestinian clusters to be handed over to the Palestinians.

Palestinians and the international society highly disagreed with Sharon's proposal, so it never had a chance to succeed.



#### 2008OLMERTPARTITIONPLAN

During being Israel's prime minister, Olmert proposed a final land partition plan, in which most of the Israeli settlements were to be evacuated from the Occupied Territories, 80% of the Occupied land was to be given to the Palestinians, and even areas around the Green Line and the Gaza Strip border were to be annexed by Palestine.

Olmert showed Abbas the proposal, but Abbas was not allowed to take the drawings with him - which was reason enough for him to decline the offer.

Right-wing and ultra right-wing Jews disagreed with Olmert's proposal, having the consequence that Olmert was killed by a Jew.

#### **PRESENTLANDPARTITION**

#### SINCE THE 1993 OSLO PEACE ACCORDS

During the 1993 Oslo Accords, being part of the peace process, the Palestinian Authority was created and was assigned the control about elements of the Palestinian Territories.

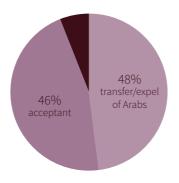
Only the territory controlled by the Palestinian Authority is seen as Palestinian territory, as Israeli are forbidden to enter these areas. Palestinians perceive the other area within the Green Line as being occupied by the Israeli.

## What people think

## peacemaking

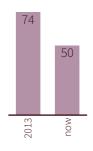
## ARAB PRESENCE IN THE LAND OF ISRAEL

opinions of Jews towards the presence of Arabs in Israel



#### PEACEFUL ISRAELI-PALESTINIAN COEXISTENCE

decrease in trust towards a peaceful coexistence



The process of peacemaking is of importance in the Israeli and Palestinian societies. Especially during government election the position of political parties towards peacemaking is a big subject.

As the Zionism and Palestinianism is in the blood and in the vains of both the people, the national and binational subjects are an important matter to the daily lives of the people. Both the wins and losses are dealt with by the people, in which peacemaking is a major influencer in the daily lives of the Israeli and Palestinian citizens.

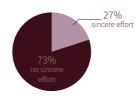
But what doe the Arabs and Israeli think about each other? What do they think with regards to peace?

A slight majority of the Jews sees the presence of Arabs in the State of Israel as undesirable. Also the trust in a peaceful coexistence decreased heavily in the past years.

Israeli and Palestinians neither think really positive about each other's persistance towards the peace process. Only a little bit more than a quarter, 27%, of Palestinians think that the Israeli government sincerely tries to have peace. Among the Israeli, only 10% of the Jews think that the Palestinian Authority is really trying to come at peace with Israel.

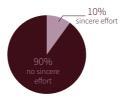
## ISRAELI EFFORT INTO PEACE MAKING

opinion of Arabs about the Israeli government towards peace



## PALESTINIAN EFFORT INTO PEACE MAKING

opinion of Jews about the Palestinian leadership towards peace



## **National anthems**

## anthems

The importance of nationalim in Israeli and Palestinian lives becomes visible by the analysis of the national anthems. The national anthem, a cultural use in which people feel united, is an important aspect of the people's culture and identity.

The fact that the people are proud to sing their national anthem, the story that the anthem tells is kept alive through all generations, and must be seen as the perpetuation of the times that the anthem was written.

Interesting is to notice the two national anthems of the Palestinians - which are both used by the people, although Fida'i is the official anthem of Palestine.

Mawtini is the official national anthem of Iraq nowadays, but many people that support the Palestinians, including the Palestinian diaspora and the Palestinians within the West Bank and the Gaza Strip, sing the Mawtini in favour of the Palestinians.

The similarity between the two anthems that Palestinians and their supporters use, is that both the anthems are based on fear and anxiety to loose their land, but the will to fight for it and never give up. The anthems argue from a victim's position, and strenghten the sense of fighting back.

On the contrary, the Israeli anthem's base is from the perspective of wishing to get what belongs to them. The anthem pronounces the wish and hope for a free nation at a specific territory as an innocent message. While the Israeli sing from a innocent perspective, the Palestinian anthems sound hostile - something that probably is an advantage for the

Israeli position and reputation.

### HATIKVAH (THE HOPE)

As long as in the heart, within,
A **Jewish soul still yearns**,
And onward, towards the ends of the east,
an **eye still gazes toward Zion**;

Our hope is not yet lost,
The hope two thousand years old,
To be a free nation in our land,
The land of Zion and Jerusalem.



## FIDA'I (THE WARRIOR)

My country, my country
My country, my land, land of my ancestors
Fida'i, Fida'i
Fida'i, my people, people of eternity

With my **determination**, my fire and the volcano of my vendetta
With the longing in my blood for **my land**and my home

I have climbed the mountains and fought the wars I have conquered the impossible, and crossed the frontiers

With the resolve of the winds and the fire of the weapons And the determination of my nation in the land of struggle

Palestine is my home, Palestine is my fire,
Palestine is my vendetta
and the land of withstanding

By the oath under the shade of the flag
By my land and nation,
and the fire of pain
I will live as a Fida'i,
I will remain a redeemer,
I will die as a Fida'i - until
my country returns

Fida'i

## MAWTINI (MY HOMELAND)

My homeland, My homeland
Majesty and beauty,
sublimity and splendor,
Are in your hills, are in your hills
Life and deliverance, pleasure and hope
Are in your air, are in your air
When will I see you? When will I see you?

Secure and prosperous
Victorious and honored
Will I see you in your eminence
Reaching the stars, reaching the stars?
My homeland, my homeland
My homeland, my homeland

## Our youth will not tire, until your independence

Or they will die, or they will die We will drink from death and never be to our enemies

Like slaves, like slaves

We do not want, we do not want

An eternal humiliation

nor a miserable life, An eternal humiliation nor a miserable life,

#### We do not want, but we will bring back

**Our illustrious history**, our illustrious history

My homeland, my homeland
My homeland, my homeland
The sword and the pen not the talk
nor the quarrel
Are our symbols, are our symbols
Our glory and our covenant
and a duty to be faithful
Arouse us, arouse us
Our honor, Our honor

Is a noble cause and a waving banner

Is a noble cause and a waving banner
O, behold you in your eminence
Victorious over your enemies

Victorious over your enemies **My homeland, my homeland** 





THE NEED FOR CONTROL OF TERRITORIES AND USE OF NATIONAL BOUNDARIES IS EXPLICITLY ANNOUNCED IN THE NATIONAL ANTHEMS.

## Language, origin and religion

## language

The national language(s) of Israel and the Palestinian Territories are both Semitic languages, equal to almost all languages in the Middle East and the North-East of Africa. Semitic languages descend from Sem, one of Noach's sons.

Palestine has only Arabic as its national language, which is a Central Semitic language. Arabic is spoken in Palestine, but also in its surrounding countries such as Jordan, Egypt, Lebanon, Syria and Saudi-Arabia.

Israel uses both Arabic and Hebrew as its official languages, although Hebrew accepted as the national language. Hebrew is seen as a Northwest Semitic language.

Both entities use (equal to other countries in the Middle East) English at public (and commercial) signs to translate for people that do not understand their language.

In Palestine this means a biliangual environment of Arabic and English, while in Israel Hebrew, Arabic and English form a trilingual environment.

Whereas English is written through the Latin alphabet, Hebrew is written according the Hebrew alphabet, and Arabic is written through the Arabic alphabet.

Hebrew alphabet uses the words or latin numbers for counting, the Arabic alphabet contains its own characters for counting.

Hebrew Ralef alef bet Arabic lalif ba

The languages in Israel and the Palestinian Territories are strongly related to the three major monotheistic or abrahamic religions.

The area - then called Canaan - was according the book Genesis promised by God to the progeny of Abraham, descendent of Sem. Ultimately it was one of the grandchildren of Abraham - Jakob, also named as Israel - that conquered the Canaan.

The area of Israel and Palestine is strongly connected to the language that people speak, and thus also to the religions that arose in these areas.

The Old Testament of the Christians and the Tanakh of the Jews are both written in the semitic language Hebrew, at the place of their origin. The Quran - the Islam also has its roots in Abraham - is also written in a semitic language: Arabic.

In a land of complex social structures, war and disagreement on identity, nationality and ownership, the Hebrew and Arabic manners for greeting each other are noteworthy. Both in Hebrew and Arabic, the salute between (unacquainted) people happens through respectively Shalom and Salam, both meaning 'peace'.

31

# ירושלים

اورشلیم (القدس) Jerusalem

ים הנולח البحر المبت Dead Sea

## Kosher, halal, and alimentary heritage

## alimentation

The tradition of food of Jews and Arabs has a long and extensive history. From religion the people most strict follow the rules of their religion for the consumption of food and drinks. For the Muslims this means that they have to eat Halal. The Jews are subject to Kosher meals and eating habits.

One can find many places in Israel and the Palestinian Territories that only serve kosher or halal food. Even multinational chains, such as McDonald's, have establishments that only serve meals according the rules of the specific religion.

The Torah descrives whenever food is kosher. Animal species that both chew the cud and have split hooves are allowd to be eaten. Pig in this context is forbidden to eat. Winged animals may not be eaten, just like insects or things that crawl in the earth. Fish, when having both fins and scales are all allowed to be eaten. Anything from a kosher animal is seen to be kosher too. As blood is not allowed to be eaten, eggs can only be eaten if there is not blood in the egg volk. To avoid blood - eating the life - certain meats are washed in water to drain the blood out of the meat. Besides, animals should be slaughtered ritually for being kosher. Meat and milk are forbidden to be eaten together, as well as to be prepared in the same place with the same tools. Fish and meat however are not forbidden, but advised not to eat together.

The Islamic Law is the set of rules that describes what is halal and what is not (haram). For eating meat, basically the same animals are allowed to be eaten. Difference is that the camel is not allowed to be eaten by Jews, while this is permitted by the Islamic Law. An addition to

the slaughter of animals is that only meat is allowed if the animal is killed in the name of God. The Islamic Law does not wield any restrictions for the assembly or separation of certain alimentation, thus milk and meat are eligible for mixing. Nevertheless, while the Torah does not forbid any alcohol, the Muslims are not forbidden to have any alcohol in their food or drinks.

Israel and the Palestinian Territories are part of the birth of the Middle East cuisine. Many world-known products and meals have their first existence in this region.

The area is home to the pita bread, sprinkled with the typical herbal mixture za'atar. Shakshuka is a tomato-egg mixture, mostly to be eaten as breakfast for lunch, but also possible for dinner. Israel is famous for its delicious falafel, to be eaten with the popular chick pea based humus. Palestine is known for its tabouleh and ptitim salad. For desert we should not forget about baklava and shabbat bread.

The abovementioned is only a small selection of the complete Israeli and Palestinian cuisine.





Jewish MacDonalds as kosher restaurant ≈

## **Conclusions**

## culture

The shape of Israel and the Palestinian Territories has shown itself - involuntarily - very fluent since the beginning of the 20th Century. The creation of one binational state looks far away; even a longlasting peaceful and tolerant and loving coexistence of two national states seems to be at a large distance, but not unreachable.

Nationalism is deep rooted in the hearts of the Israelis and the Palestinians. Both Zionism as Palestianism would like to see 'their' land with their national borders, and the followers are willing to fight for it.

The tolerancy level towards each other is low, just as the trust and confiance in the 'other' party.

Politically, a fight between the two entities exists, but also at the level of citizens the mistrust between the groups is large. The people strongly hold on to their roots, which are quite different from each other, primarily because of religion and background.

The shape of Israel and Palestine have changed much since the creation of the State of Israel after the British Mandate in the beginning of the 20th Century. Involuntarily, a territory with national boundaries was created and declared independent on a territory that was inhabited and to be shared with people that did not follow the same norms and values through their background and religion.

Jews and Arabs antagonize each other and many conflicts arose since the immigration of Jews to Historic Palestine.

Through nationalism and identification to territories through memories and ownership, Zionism

and Palestinianism became highly present in society. The extreme forms of nationalism, the wish for territorial management and national boundaries are represented in all the people of Israel and the Palestinian Territories, and are engraved in the history and the roots of Israelis and Palestinians.

Contrarily, the culture, norms and values, origin and even the religion of Israelis and Palestinians do no differ so much from each other. At one point in time all people were even the very same collective. This communal offspring is still visible in the present forms of e.g. language and habits.

The process towards peace in ongoing, but real solutions seem to be far away. Nevertheless, no major conflicts have arosen in the last couple of years, Hamas and Abbas(Fatah) have come closer to each other, and younger generations now have experienced to live next to each other without violence. For that reason, from my knowledge and insight, a two-state solution is reachable and manageable in the near future







### Layers of population

# demography

Israel and the Palestinian Territories are densily populated. How does this population look? How is the population spread throughout the region, and what are the daily activities of the people?

The Israeli-Palestinian society is complex because of the (co-) existence of people with different opinions and convictions next to each other. Jews and Arabs form the largest groups within the population composition, but also Christians, Atheists and people with other religions exist in the region.

Besides, especially the Jews and Arabs are far more complex groups than it seems. Especially amongst the Jews there is a large divide between the people. What does this mean, and how do the people coexist?

Next to that, how do the people spend their time? Inhabitants of coastal places such like Tel Aviv visit the beach often.

The demography chapter will demonstrate the facts about the Israeli and Palestinian population through text frames, diagrams and images, in order to inform about the context of demographical features.



## Where people live

# population

## ISRAELI POPULATION DENSITY

persons per square kilometer of land - by district



#### 8.463.400 INHABITANTS SPREAD

4,6% of total lives in Israeli localities in *Judea & Samaria* 



Israeli statistich are divided in what is called the State of Israel, and what is to be seen as the Occupied Territories - the West Bank. The government of Israel consequently names the West Bank 'Judea & Samaria' referring to the history when the West Bank hills were part of the Kingdom of Israel.

The population is mostly concentrated at Tel Aviv. Also the district of Jerusalem and Haifa belong to the densily populated areas. For comparison: the Tel Aviv area density is 100 times higher than the Negev Desert's population density.

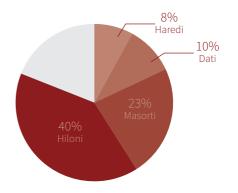
With almost 8.5 million inhabitants, the overall density of Israel is 20 times as low as Tel Aviv's density, and 3-4 times as low as Haifa and Jerusalem's density.

In contrary to the Palestinian

Authority, Israel considers the West Bank as one governorate division. Within Judea & Samaria, nearly 5% of the total populations lives in settlements, which comes down to 389,316 people.

#### ISRAELI JEWS BY SECTOR

share of Jews of the total population



#### **JEWS VERSUS NON JEWS**

Although Israel is a Jewish State, it is not only Jews that live in Israel. Government institutions and daily life is practically equipped following the Jewish rules, but many people are welcome to live in the State of Israel.

According to the Pew Research Center, 81% of Israeli population is Jew, the other 19% is not.

The share of Jews is again divided in four types, that are quite different from each other at the extremes. The following pages will elaborate more onto the Jewish divide.

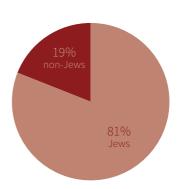
The Land of Israel has long been inhabited by the Arab population. Through history, the land and its historical heritage sites always has been important to not only Jews and Muslims, but also to Christians, Druze people, people from other religions and atheists.

Clearly visible in the share of Muslims in Israel, which is 14%, is the wars over territories. Many Muslims still make part of Israeli society, even though it is a Jewish State.

Interesting is the small amount of Christians in Israeli society. Even though many Christian holy sites are to be found in Israel and the Palestinian Territories, it seems that the Christians do not feel any need to have ownership of those sites and territories.

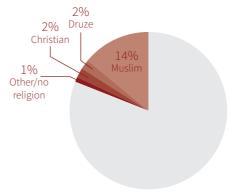
## ISRAELI PEOPLE COMPOSITION

share of Jews and non-Jews in Israel



#### ISRAELI NON-JEWS BY SECTOR

share of non-Jews of the total population

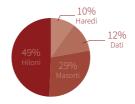


### Jew partition

# composition

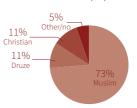
## ISRAELI JEWS COMPOSITION

share of Jews per sector of Jew population



## ISRAELI NON-JEWS COMPOSITION

share of non-Jews per sector of non-Jew population



#### **JEW PARTITION**

What are the different kinds of Jews that exist, and what is the composition of the different Jews in Israel? The diagrams above and at the right page show the composition of Jews from the different directions within Judaism in the State of Israel.

Generally four types of Jews can be distinguished, the Haredi, Dati, Masorti and Hiloni. In the sense of their strictness of religion, these four parties could be seen as respectively the Ultra-Orthodox, Religious, Traditional and Secular Jews. As if the partition of people on a small territory between two religions is not enough, also the people of the different parties are socially separated from each other. The Hilonim and Haredim are even that much separated and different

from each other, that parents of a child rather want that child to be married to a Christian than a child of the other Jewish party.

All Jews more or less agree with each other on the question whether Israel could both be a Jewish State as a democracy. Contradictory, the people disagree on whether democracy or religious laws would have priority.

From Hiloni to Haredi, the differences also correlate with the opinions on the political spectrum. The Haredi and Dati lean towards the right, while the Masorti and Hiloni lean towards the center or even leftist wing.

Most significant of the composition of Jews in the future is the growing group of Haredi, and the

## CHANGE IN ISRAELI JEWISH COMPOSITION

interchange of Masorti and Haredi Jews



decreasing group of Masorti, while the group of Datim and Hilonim stay relatively constant. THE DIFFERENCE
BETWEEN THE
JEWISH GROUPS
IS AS BIG AS THE
DIFFERENCE
BETWEEN JEWS
AND CHRISTIANS.

#### **Conclusions**

# demography

Many people live with, next to and by each other in Israel and the Palestinian Territories. Although it may seem easy and rightful to divide the people in Jews and Muslims, society is more complex and complicated than only that.

On a small land more than 10 million people are scattered through the territories of what now may be recognized as Israel and the Palestinian Territories. Most of these people are however centered in and around the city and district of Tel Aviv at the Mediterranean Sea.

Though, even more interesting is what these people think, do and want and for what reason.

In Israel and the Palestinian Territories live primarily Jews and Muslims, when filtered by religion. Only a small percentage of the people follows another religion or does not have any religion. Next to atheists, druze people, bedouins, samaritans and christians inhabit parts of the Land of Milk and Honey.

Judaism is not as simple when analyzing closely as when seeing it as one group from afar.

Tews are divided primarily four groups that range from conservative and traditional to secular and non-practicing Jews. The Haredi, the ultra-orthodox group is growing in absolute numbers and proportionally in comparison to the other Jews, this in advantage of the religious Masorti. Also, the traditional Dati at the other side are losing people to the secular Hiloni. Although the Hilonim remain the largest group of Jews in Israel, the groups of both the extremism towards or secular or ultra-orthodox is growing in Israeli society, and pulling people apart from each other

within the borders of Israel.





## Complex or complicated

## politics

Politics in the area or Israel and the Palestinian Territories is extremely complex and complicated.

Wars and conflicts between the Israelis and Palestinians originate from the national and international politics. Decisions made by the U.S.A. can influence the stability and tolerancy within the Israeli and Palestinian society.

At one side, Israel has a working government although it is suspected highly of corruption. At the other side there is a government with a leader for the Palestinians at the West Bank, and there is a leader in opposition for the Palestinians at the Gaza Strip. For a long time, Hamas form Gaza and Abbas (Fatah) from the West Bank have not collaborated until only recently.

Next to the politics that highly influence the stability in the region, the discussion on what the capital city of Israel is and what the capital city of Palestine or the Palestinian Territories is, is delicate and the tempers can run high.

Although Israel Jerusalem as its capital city and all of its official government buildings are established in Jerusalem, also the Palestinians see Jerusalem as the only and eternal capital city of theirs. Although the de facto capital of Palestine is Ramallah, i.e. all official government buildings of Palestine are in Ramallah, Jerusalem as (partial) Palestinian capital is one of the most important conditions for and towards a two-state-solution between Israel and the Palestinian Territories.

In this chapter, a short summary of the political situation in Israel and the Palestinian territories is given to create an understanding of the situation in key points.



### **Bibi politics**

## israeli system

The Jewish State of Israel has a fully functioning government that follows the concept of trias politica: the separation of three powers of legislation, execution and justice.

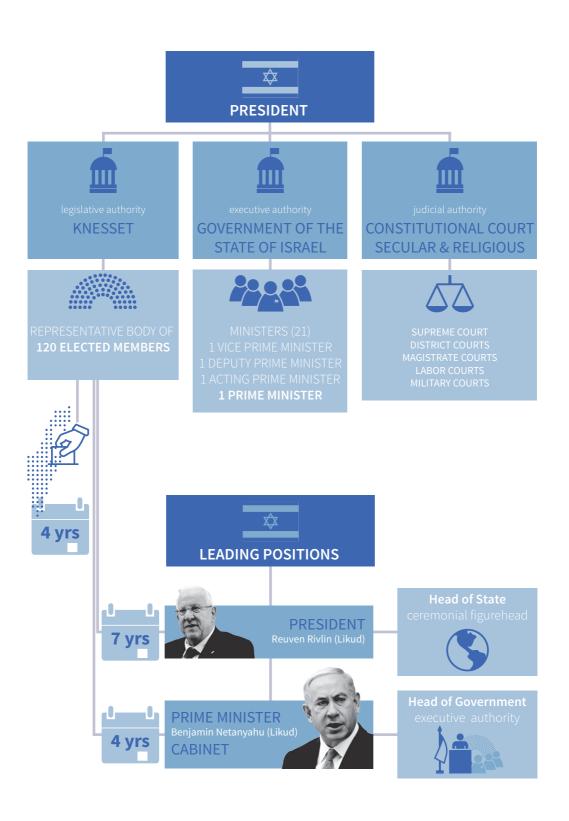
Israel is a modern democracy. The representatives of the population are elected every 4 years, and consist fo 120 members in the 'Knesset'.

Israel has a multi-party system, and it is common to have a coalition government. Over the past years the biggest party is Likud; also most prominent positions in the government are embodied by Likud members.

The state is led by the president or Head of State and the prime minister or Head of Government. At this moment, Reuven Rivlin from likud is the president of Israel. The embodiment of the position as president is elected every 7 years by the Knesset.

Together with the elections for the Knesset, every 4 years the prime minister is elected by the Knesset. Benjamin Netanyahu or 'Bibi' is the leader of the cabinet and has been so for the last couple of terms.

Interesting about the judicial authority of the State of Israel is the existence of secular and religious courts.



#### Abbas ft. Abbas

### palestinian system

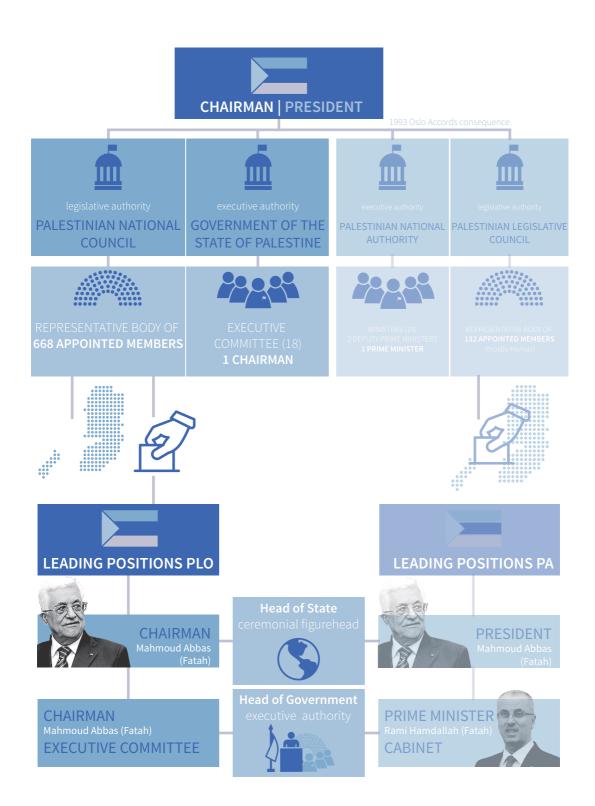
The Palestinian Territories are under control of merely an organization than a government.

As I focus on mostly Israel and the West Bank, I have left out the information on the Gaza Strip in this part.

The Palestinian Liberation Organization (PLO) is an important movement in the Palestinian Territories, led by chairman Mahmoud Abbas - follower of the political party Fatah. The PLO declared the State of Palestine independent, which is recognized by 136 out of 193 countries. Mostly Western countries and Israel do not recognize Palestine (yet).

The shadow government of the Palestinian Territories, though mostly at the foreground and a legal political system, is the Palestinian Authority or PA. At the 1993 Oslo Peace talks the PA was founded and ruled under Yasser Arafat. Led by Abbas nowadays, president of the PA, the prime minister Rami Hamdallah and its cabinet form the Head of Government. The representative body of the Palestinian Legislative council exists of 132 appointed members.

The government of the Palestinian Territories does not have a third separate power in the form of a judicial authority.



## **Peace and uprisings**

## peace politics

Attempts for peace in the conflicted situation of Israel and the Palestinian Territories have been present at all times since the conflict takes place. Nevertheless, final solutions have not been made yet, and uprising - smaller and bigger - are still playing a role in the lives of Israelis and Palestinians, to different extents comparing Gaza and the West Bank and the adjacent areas in Israel.

**Important** (internationally) significant uprisings of the past are the Hebron Massacre of 1929 when 67 Jews were killed, or the terrorist attack by Baruch Goldstein in the Cave of Patriarchs or Ibrahimi Mosque killing 29 Palestinians and wounding 125 people. The last massacre caused an uprising throughout the entire West Bank. Major Palestinian uprisings happened in the late eighties of the 20th Century and in the beginning of the 21st Century. These 'intifadas' were against the Israeli occupation of Gaza and the West Bank. The first intifada started after the death of 4 Palestinians in a collision with an IDF truck. The intifada lasted from 1987 till 1991 (or some say 1993). The second intifada started of a highly provocative visit of Ariel Sharon to the Temple Mount in Jerusalem. From 2000 the second intifada lasted till 2005 when Mahmoud Abbas (Palestine) and Ariel Sharon (Israel) signed the agreement to stop violence.

The first intifada led to the peace conversations in Oslo of 1993. The Oslo Accords signed in 1993 by the associated parties - the Government of Israel and the Palestinian Liberization Organization (PLO) - includes the creation of the Palestinian Authority, the definition of areas in the West Bank, and Israeli withdrawal from Gaza and Jericho (Gaza-Jericho agreement) and 80%

from Hebron (Hebron protocol). The first Oslo Accords were signed between important figures as Yasser Arafat, Yitzhak Rabin and Shimon Peres, all three winners of the Nobel peace prize.



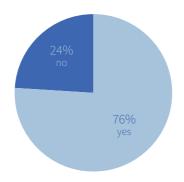
THE FIRST INTIFADA LED TO THE PEACE CONVERSATIONS IN OSLO OF 1993.

## **Jewish democracy**

## government

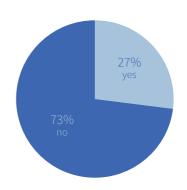
## ISRAEL'S DEMOCRACY AS JEWISH STATE

Jewish opinion towards the possibility of the Jewish State being democratic



## ISRAEL'S DEMOCRACY AS JEWISH STATE

Arab opinion towards the possibility of the Jewish State being democratic



Is Israel a democracy? And how is this combined with the status of a religious state? And how do the people see this?

The Jewish people themselves think with a majority that this is possible. Mostly the people against are the secular Jews that do not believe that democracy can go hand in hand with the rules of the Torah. Next to them are the Arabs that live in Israel. Most of them are Palestinians that did not look for or find refuge in the West Bank or Gaza and stayed in Israel - thus gain Israeli citizenship. The Arabs do not see the Jewish rules applied by the government a something that could be democratic in a multicultural and multireligion state.



### **Conclusions**

# politics

The political system of Israel and Palestinian Territories - and its consequences - is complex and complicated and of international significance.

The leading parties of Israel and the Palestinian Territories are in conflict with each other, and peace talks happened for the last time in the last decade of the 20th Century.



# economy research

## Money, money, money

## economy

Then what is the used currency in Israel and the Palestinian Territories? And how do the entities get funding?

The national currency to be paid with in Israel are Shekels and also in the Palestinian Territories someone is able to pay with Shekels. Besides, in the Palestinian Territories the Jordanian Dinar and the US Dollar are accepted.



#### Howdie

## economy

Agriculture is most important for the Israeli and Palestinian economy. Besides, agriculture plays a big role in the territorial conflict.

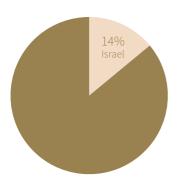
On first sight, in comparison to other agricultural countries, Israel does not seem to subsidize agriculture a lot. Only 14% of Israel's GFR goes to agriculture subsidies, while the average percentage of OECD countries of their GFR that goes to agriculture subsidies is 19%. Norway and Switzerland even spend more than 50% of their GFR to agriculture subsidies.

Nevertheless, agriculture is important in Israel and the Palestinian Territories and many products from Israel are exported all around the world

Agriculture is characterized by the use and cultivation of land (and water) and thus it is a territorial tool that is largely used in the Israeli-Palestinian conflict with regards to land and water ownership.

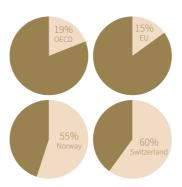
Agriculture in Israel and the Palestinian territories is stimulated and stipended by the government and leading organizations.

#### AGRICULTURE SUBSIDIES share of agriculture subsidies of GFR



# OTHER COUNTRIES ON AGRICULTURE

share of agriculture subsidies of GFR



AGRICULTURE IS MOST IS MOST IMPORTANT FOR THE ISRAELI AND PALESTINIAN ECONOMY.
AGRICULTURE ALSO PLAYS A BIG ROLE IN THE TERRITORIAL CONFLICT.

#### Israeli economics

## economy

For Israel, agriculture is important and is stimulated and stipended by the Israeli Government.

Israeli agriculture (throughout Israel and the West Bank) provides food Israel of food without any possible interruptions through boycots from the international environment as it is dependent on its national industry. Also the food is controlled nationally, thus protected.

From the ancient 'rules' and habits, land ownership is defined by use as well as water is allocated according to actual use. Agriculture is used to be able to (continue) owning land and to (keep) having the right to a certain extent of water supply. This tool is used territorial and also keeps control of remote areas

In the outlying regions, the agriculture controls the areas far from the actual internationally recognized State of Israel, and separates Arabs from other Arab state borders. Agriculture is stimulated in the Golan Heights, the north of Israel bordering Lebanon, the east of the West Bank bordering Jordan and the south Israeli desert bordering Egypt and Jordan and around Gaza.

Also romantic ideas are attached to the idea of agriculture. From the Zionist movement specifications, agriculture is important in the being of Jews in the Holy Land.

FOOD PROVISION & SECURITY

protect the food and its supply from import and boycots



# SETTLEMENT OF OUTLYING REGIONS

control and separate Arabs from other Arab state borders



LAND CONTROL & OWNERSHIP

ability to control the remote areas



## ZIONIST MOVEMENT SPECIFICATIONS

romantic attachment to agriculture from Zionism



#### **Palestinian economics**

## economy

For Palestinians agriculture is important to be stimulated. Through the higher prices on produce in the State of Israel, Palestinians benefit from the Israeli selling prices through semi-porous borders. Palestinian produce slips through the Green Line and is to be sold in Israel for higher prices.

As Israel uses agriculture to control land ownership and the availability of water, also the Palestinians use agriculture to be entitled to land ownership and water rights. Not actively tilled land and consumed water leads to the loss of ownership and rights.

Besides, through the unstable Palestinian situation and economy, the West Bank is not attractive for international investors. Agriculture thus is the only economic sector in which Palestine can exercise control

#### **PALESTINIAN BENEFITS** FROM ISRAELI SELLING PRICES

Palestinian produce slips through porous Green Line



#### **ONLY ECONOMIC SECTOR** TO EXCERCISE CONTROL

situation too unstable to exercise other sectors



# **ENTITLEMENT TO**

**LAND & WATER** not actively tilled land & consumed water leads to loss of ownership & rights



#### **Conclusions**

## economy

Israeli and Palestinian economics are interwoven and mostly the Palestinian economy is dependent on the Israeli economy. Israeli currency is used throughout the West Bank and the Palestinian agriculture sector depends on the prices in Israel.

Agriculture is an important economic factor as a territorial management tool, and therefore it is widely used and implemented throughout Israel and the Palestinian Territories. As the use of land goes together with the consumption of water, the water rights are an important aspect of the territorial management.

# infrastructure research

#### Pass or return

#### infrastructure

The infrastructural system in Israel and the Palestinian Territories is mostly paid, constructed and maintained by the Israeli government and the Israeli defense forces.

Roads throughout the territories are built by Israelis mainly by reason to provide Israelis with good infrastructure. Electricity cables and water tubes connect the houses to the source and provide the people with their needs.

Palestinians are responsible for their own infrastructure, but do not always have the means, freedom and power to do this. Palestinian infrastructure therefore sometimes lacks quality and quantity.

Unfortunately, the built infrastructure Israel often has its place on the ground surface and the goal to prevent people from moving around easily. Most famous or infamous are the concrete walls that stand on the ground till 6 meters high in the air, often decorated with barbed wire and graffiti, patrolled by the Israeli military.

In addition, watch towers, cameras, patrol cars and checkpoints are part of the notorious infrastructure of 'protection and security'.

This chapter shows the infrastructure in Israel and the Palestinian Territories, and explains what consequences the infrastructural interventions have on people's lives.

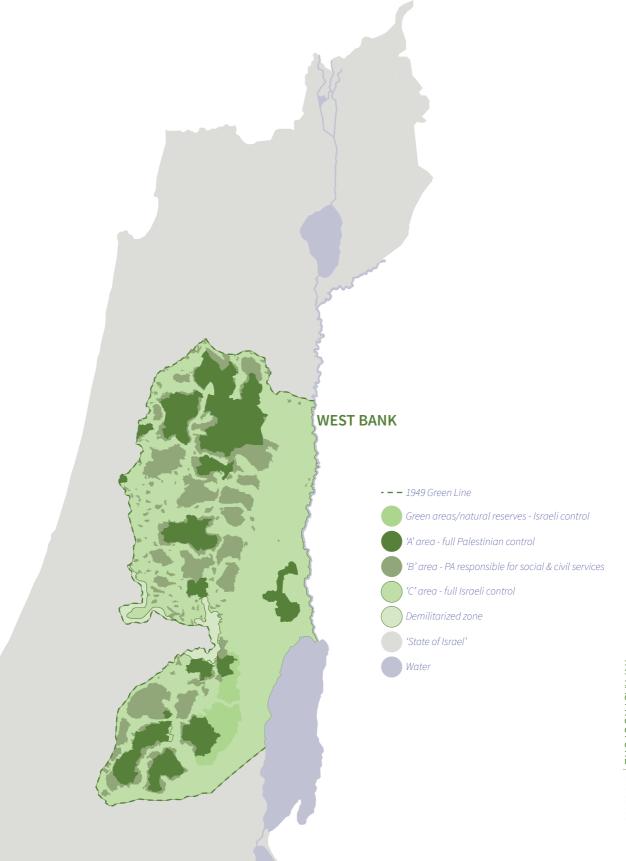


### In is the new out

### land control

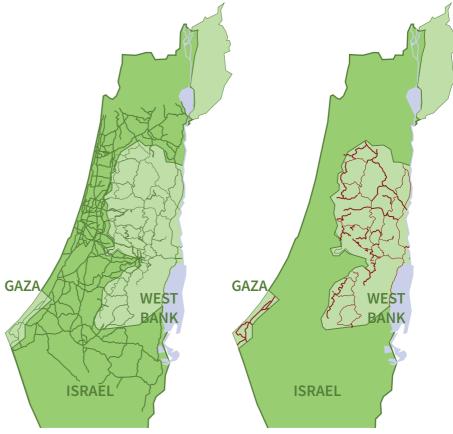
When we look at the map of the West Bank, and how and by whom the area is controlled, several aspects become clear.

Although the 1949 Armistice Agreement-line (Green Line) is internationally often seen as the border between Israel and the West Bank, or the border between Israel and Palestine, it may now be clear that most of the area within the Green Line is actually under full control of the IDF, the Israeli military.



#### Please make a u-turn

### people

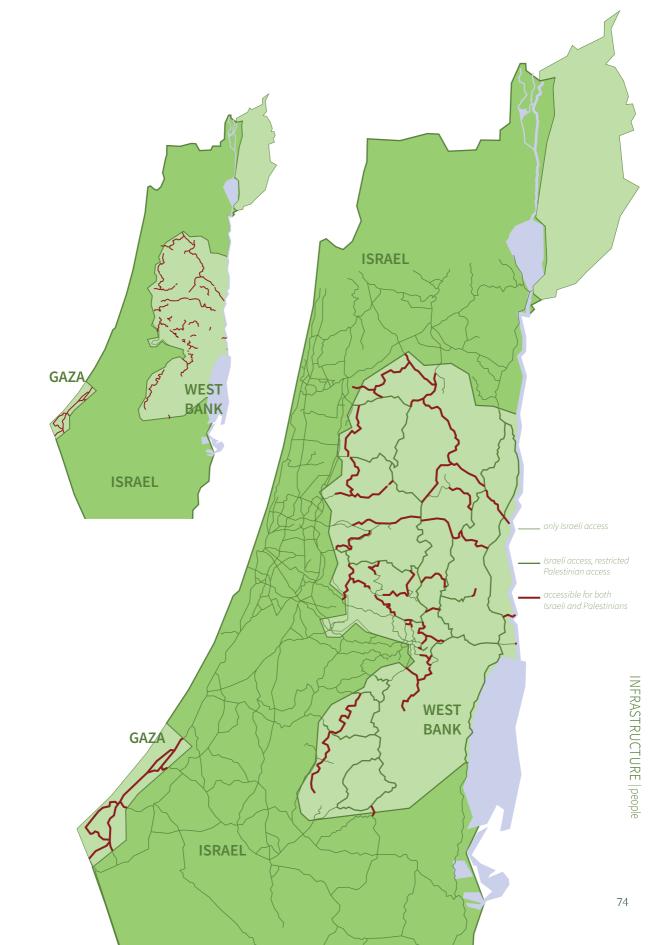


What is the infrastructure of people's movement like? How does the infrastructure influence daily life of the inhabitants?

Israel is a developed state and has one of the best road networks of the middle east, comparable to the network of Western European countries. The Palestinian Territories however, have a network of only a couple of roads and safety and security on the road are not has high as in Israel. Besides, for the Palestinians and Israelis not all roads are (easily) accessible.

Highway 60 runs from the north of the West Bank to the south and is accessible for both Israelis and Palestinains. When accessing Israeli settlements and communities in the West Bank, Palestinian access is restricted or not permitted. In 'A'-areas, the streets and roads are forbidden to enter by Israeli people.

The network of roads and restrictions on access cause inequality and may create scattered routes for one or the other to go from one side to the other.



#### Israeli water flows

### utilities

In the past, the water flow in Israel went from north to south. The source of the Jordan River, the Sea of Galilee and the water from the Golan Heights mountains provided Israel - and mostly the Negev desert agriculture - of water through the NWC, the National Water Carrier.

As desalination becomes more and more important, and the Sea of Galilee has less renewable water, water will be directed to the north and south from the coastal area - the area of desalination plants.

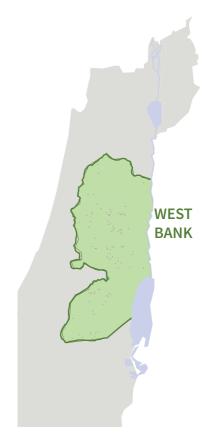




### Acupuncture urbanism

### settlements





Although Israel does not seem much different from Western countries, the West Bank is a different place to move through. When crossing the the 1949 Armistice Agreement Line, or Green Line, one will encounter checkpoints, outposts, settlements, different styles in urbanism and architecture, and different language signs spread over the territory.

The area of the West Bank is a territory inhabited by different people that do not communicate much. Moreover, the area is characterized by control, antagonism, territoriality, nationalism, militarization, fear and resistance.



#### Game of lines

#### borders

Drawings mean a lot in a conflicted situation as the Israeli-Palestinian one. Though, drawings can become weapons and new truths instead of visualizations of the existing situation.

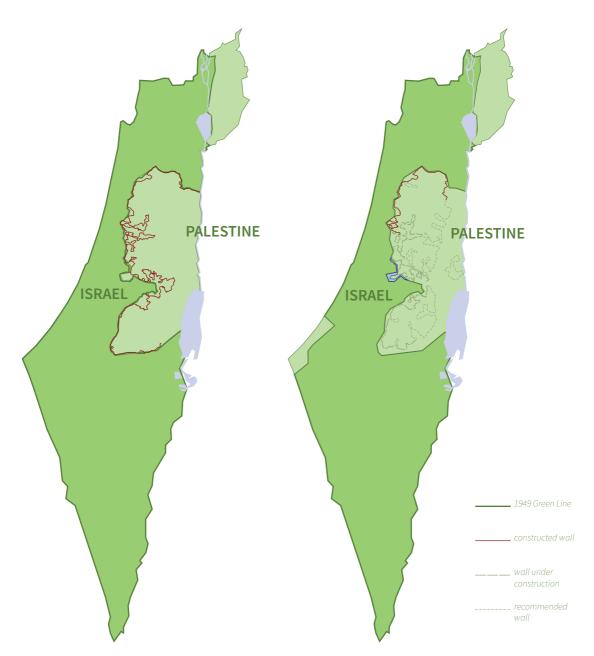
Thin lines on a map become physical objects in space. Concrete walls and no-go zones embody the actions on the drawings tables and the results of (peace) talks.

For protection and security, the Israeli government started building walls after the fear of terrorist attacks of Palestinians after the Second Intifada

Israeli settlements are surrounded by 6-meter high walls which meander through the mountainous landscape, excluding and enclosing Palestinian cities and villages. Around Jerusalem, more than 200 kilometers of walls already have been built of the total length of 708 kilometers; the Israeli government is planning on builidng more walls throughout the entire West Bank.

The Israeli government treats the walls as the security fence or the security barrier. Palestinians on the contrary call it the Apartheid Wall or separation wall.

The English BBC, The Economist and the New York Times call the wall the separation barrier as well.



#### **Hidden limitations**

### coverage

Not only the visible infrastructure is managed territorial and used as a territorial management tool. Also the invisible infrastructure is important within the management and territoriality of the land.

Palestinian areas are supplied with 2G telecom coverage while Israeli controlled areas have the benefits of the availability of 3G and 4G telecom coverage.



### **Conclusions**

### infrastructure

The infrastructure in Israel and the Palestinian Territories visibly translates the territorial management policies to an embodiment of roads, checkpoints, walls, water infrastructure and many other infrastructural elements.



# water research

#### Soaked, but withered

#### water

Water scarcity, decreasing resources and territorial dependent withdrawal and supply are key issues in Israel and the Palestinian Territories.

The annual rainfall in Ramallah is higher than London's annual rainfall, but still Palestinians suffer from water scarcity and shortages. According to the WHO (World Health Organization), the minimum standard per capita per day is 100 liters. Palestinians averagely are able to consume 55 liters per day per capita, only 55% of the minimum standard. The Israeli people, however, have access to enough water to comply with the standards of a wealthy country. As a result, the situation is recognized by mostly the Palestinians as unfair and unequal.

Although the annual rainfall in the Judea and Samaria mountain range at the West Bank is high for an area being know as (hyper-) arid, this rainfall is to be divided upon a large area with only a low annual rainfall. For example, the 2005 rainfall in Nablus was 790.5mm with a mean temperature of 18.1 degrees celsius, while the 2005 data for Jericho is respectively 117.0 and 23.3.

Water scarcity has been taken for granted for a long time. Water use is even a political medium to enhance agriculture. Water as a strategical and political body is one of the sources for the increasing scarcity. Next to that, Syria has been boycotting Israel and its peace agreements with other entities by diminishing the water supply from the rivers that Syria controls. Above all, after the Second World War and the Declaration of Independence of the State of Israel, large immigration flows of Jews to the region appeared, and the population grew enormously. Besides. also the Palestinian

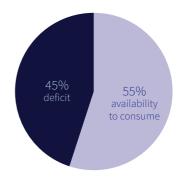
population kept growing.

Water in Israel and the Palestinian Territories in managed by the Israeli government, as agreed upon in the 1993 Oslo Accords. The water system is laid out nationally, and private ownership is annulled as from 1959 according the Water Law. The 1993 Oslo Accords agreed upon an amount of water for Israel to supply to the Palestinians, and the prohibition for Palestinians to take out water from undesignated springs and wells.

As the Jordan River Basin is used for the withdrawal of water, just like the aquifers around the Jordan River, the water supply of the river is lowering, and the water level of the Dead Sea is declining. As salt at the former under water banks of the Dead Sea is corroted through water from the aquifers, sink holes appear at the borders of the Dead Sea. Tourist facilities are being closed, areas are being cut off for being too dangerous, and the landscape is transforming into a moonscape.

### PALESTINIAN WATER CONSUMPTION

in relation to WHO minimum standard of 150l/c/d



The chapter of Water is divided into the different parts of the system, the allocation, supply and withdrawal. Furthermore it demonstrates the developments of the water system, such as desalination and wastewater treatment and reuse, followed up by conclusions.

### "More history than water in the Jordan River"

- Shimon Peres



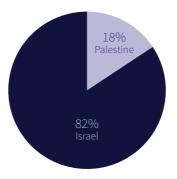
Dead Sea salt basins, Neve Zohar ≈

#### Here and there

### allocation

### GROUNDWATER USE OF MOUNTAIN AQUIFER

allocation of water use of the mountain aquifer



#### PALESTINIAN JORDAN RIVER WATER ABSTRACTION

Palestinians are restricted by the Israeli to access the Jordan River



The water allocation in Israel and the Palestinian Territories is highly dependent on the available underground sources or aquifers.

Although most part of the significant mountain aquifer lies underneath the Palestinian Territories, most water from this aquifer is abstracted by Israel. From an hydrological point of view this is also most logical, however the water is situated underneath the Palestinian Territories.

As only two-third of Palestinian households are connected to the water supply system, and as the infrastructure system looses water through leakage and bad infrastructure, other solutions have been found to supply the people of water. Palestinians make use of underground water cisterns to store the water from the rooftops.

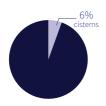
### PALESTINIAN WATER INFRASTRUCTURE

share of households connected to the water supply system



# PALESTINIAN WATER CISTERNS

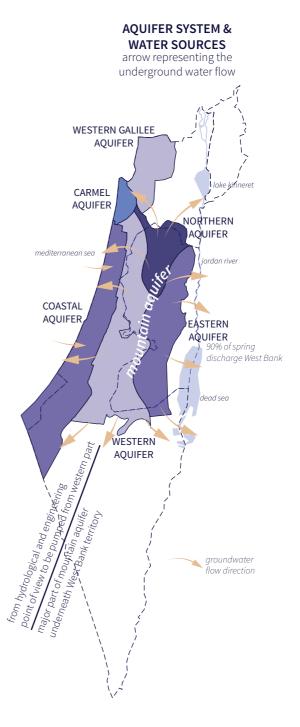
share of water supply by underground cisterns



# PALESTINIAN WATER INFRASTRUCTURE EFFICIENCY

loss of water through leakage and bad infrastructure



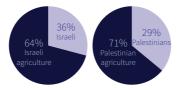


#### **Watering tomatoes**

### allocation

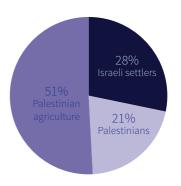
# RATIO DOMESTIC & AGRICULTURAL WATER

share of water for the people versus agricultural purposes



### WATER SUPPLY DIVISION AT THE WEST BANK

proportional division of water supply at the West Bank



Although most parts of Israel and the Palestinian Territories are arid and dry, it is also know as the Land of Milk and Honey. Especially in the north of Israel, the fertility of the ground is high and agriculture is a logical activity.

Nevertheless, for the Israeli-Palestinian area a lot of agriculture takes place, even at dryer unsuitable grounds.

Most fresh water thus is allocated to the agricultural industry of Israelis and Palestinians, taking up to 70% of the ratio agricultural use versus domestic use.

At the West Bank, next to Palestinian domestic use and agricultural use, we can find the allocation of water for the use of Israeli settlers.

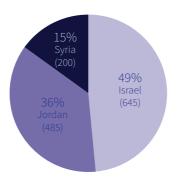
At the West Bank, not more than 21% of available water is allocated for domestic Palestinian use, while 28% is supplied to the Israeli settlers. 51% of the water is supplied for Palestinian agriculture.

#### Go with the flow

# supply

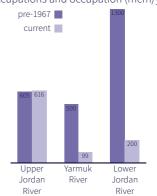
### AVERAGE ANNUAL DISCHARGE JORDAN RIVER

water discharge of the riparians from the Jordan River (mcm/yr)



### CHANGE OF ANNUAL WATER FLOW

river flow change since Israeli occupations and occupation (mcm/yr)



Where does the water come from? And is the water supply source renewable?

The Jordan River is important in the availability of fresh water. Israel, Jordan and Syria discharge water from the Jordan River - thus have communal interestes in this one current of water.

### ISRAELI WATER SUPPLY TO PALESTINIANS

Israeli water supply is agreed upon in the 1993 Oslo Accords

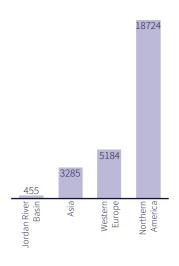


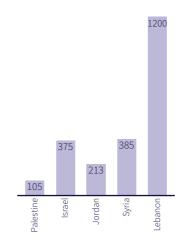
### AVERAGE RENEWABLE WATER AVAILABILITY PER CAPITA

renewable water availability in regions around the world (m3)

### RENEWABLE WATER AVAILABILITY

renewable water availability in countries of Jordan River basin (m3)





WATER
AVAILABILITY PER
CAPITA IS SMALL
IN ISRAEL AND THE PALESTINIAN TERRITORIES.
BESIDES,
THE WATER
DISCHARGE IS
DECREASING
FAST.

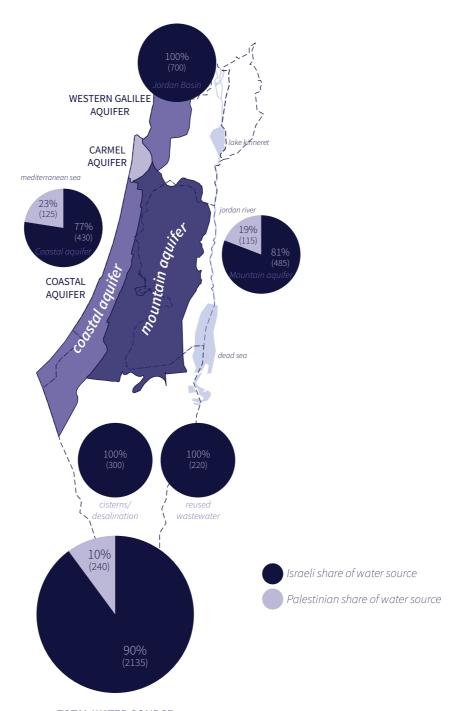
### With or without

### withdrawal

Of all the available water and the share of renewable water, most water abstractions and use of water go to Israel. Of all the water sources only 10% or 240 mcm/yr is available for Palestinians.

### WATER WITHDRAWAL IN ISRAEL/PALESTINE

division of water per source in the current situation (mcm/yr)



### TOTAL WATER SOURCE DIVISION

total of 2373mcm/yr of which 2060mcm/yr renewable

### Wishful thinking

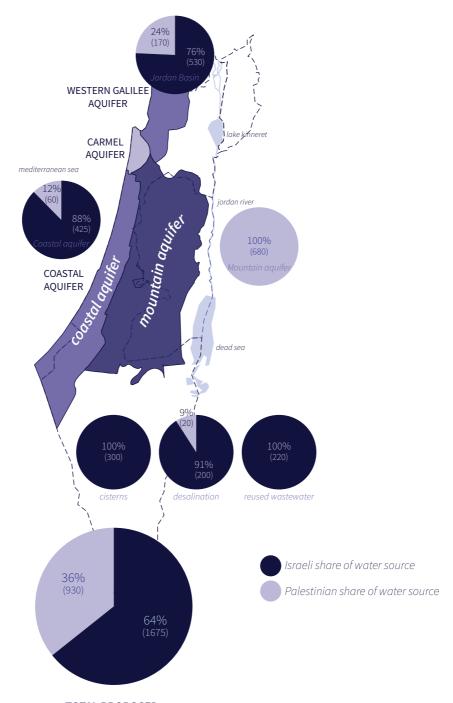
### withdrawal

Although in the actual situation the Palestinians only get a share of 10% of the available water, in their proposal for the allocation of water they propose to receive 36% of the total water share.

In this proposal the water from the mountain aquifer is fully purposed for the Palestinians.

# PALESTINIAN WATER SOURCE DIVISION PROPOSAL

division of water per source propposed by the Palestinians (mcm/yr)



# TOTAL PROPOSED WATER SOURCE DIVISION

total of 2605mcm/yr of which 2280mcm/yr renewable

### The future is calling

### developments

How does the future of water resources in Israel and the Palestinian Territories look like? Through innovations in water and agriculture, the use in water is changing. From the year 2020 the share of water from desalination runs up to 44% of the total share. Besides, 30% of water use in agriculture is reduced through modernization in the agriculture sector. Moreover, wastewater is more and more recycled in the agriculture sector.

# DESALINATION AS WATER SUPPLY SYSTEM 2020

share of desalinated water of the 2020 water supply system



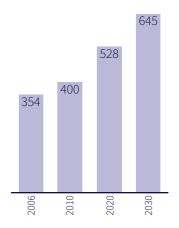
# AGRICULTURE MODERNIZATION

reduction in water through modernization in agriculture



# WASTEWATER RECYCLING IN ISRAELI AGRICULTURE

recycled wastewater to be used by agriculture (mcm/yr)



#### **Conclusions**

#### water

Water is an important source in Israel and the Palestinian Territories. Water is the source of life, and can even be a/the source of tensions, mistrust, misunderstanding, conflict and war.

In arid, dry and water scarce areas water is not always naturally available at all places; transportation of water and innovation in water abstraction technologies are essential for the present and the future.

In Israel and the Palestinian
Territories the availability and
abstraction of water sources led to
the 'War over Water' in 1964. Water
abstraction is contested: in the 1993
Oslo Accords, the Israeli government
and the Palestinian Liberation
Organization agreed upon Israeli
management of the (inter-)national
water system.

As one of the parties has control over the water management (on agreement of more than 20 years old), mistrust and misunderstanding is enhanced when the water supply is low.

Water as the source of life, thus, remains one of the most sensitive factors in the Israeli-Palestinian conflict, as it is so scarce and the management is (as some might say unequally) divided. Organizations that are involved in the water provision for Palestinians talk about a 'Hydro-Apartheid' in Israel and the Palestinian Territories.

One should keep in mind that the Palestinian Water Authority is responsible for the actual supply to the Palestinian communities. Few network systems and bad infrastructure enhance the fact that water is really scarce for the Palestinians through leakages, etc.

In the future nevertheless, a relatively new fresh water resource will be used for the withdrawal of water. Desalination is a method that will be used more and more by Israel to provide itself (and the Palestinian Territories) of water.

Gaza is partially provided with fresh water through a desalination plant as well, subsidized by the European Union.





#### **Overall conclusions**

## conclusions

The research themes of the Israeli-Palestinian context demonstrate the working and functioning of Israel and the Palestinian Territories and its conflict.

The themes show what the cultural and demographic characteristics are and translate the political, economical and infrastructural key facts and figures. Moreover, the special theme of water gives an extensive information flow of what the water situation in the water scarce and arid climate of Israel and the Palestinian Territories is.



'HISTORIC PALESTINE' **IS A HEAVILY CONTESTED AREA; HOLY FOR FOLLOWERS OF** THE THREE MOST **IMPORTANT MONOTHEISTIC RELIGIONS IN** THE WORLD.

# conception

Embrace diversity: (un)divided Hebron
TEMPLE OF WATER



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#### **Grounds for design**

#### introduction

Simultaneous with the research and as continuation after the research, the design process starts and continues until a developed design is projected.

The research forms the base for the design specifications, and later on, also the design decisions.

Important is to build upon the conclusions of the research into Israel and the Palestinian Territories.

The area of Israel and the Palestinian Territories, named as Historic Palestine before the larger immigration of Jews to the 'Promised Land', is engaged in a war of identity, nationalism and ownership.

Mistrust and misunderstanding undermine the tolerance and coexistence of the Israelis and Palestinians towards each other, as a result and consequence of the divided territory by the creation of national boundaries and homogeneous states.



# sketch design conception

#### **Design specifications**

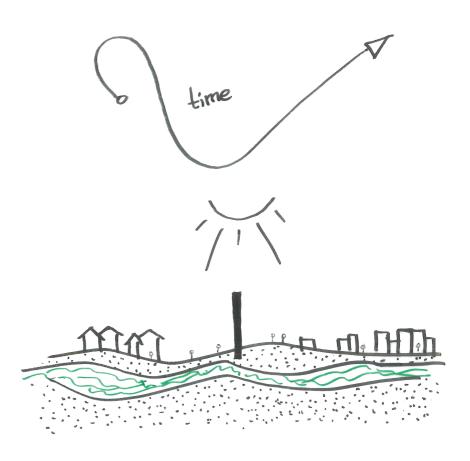
## specifications

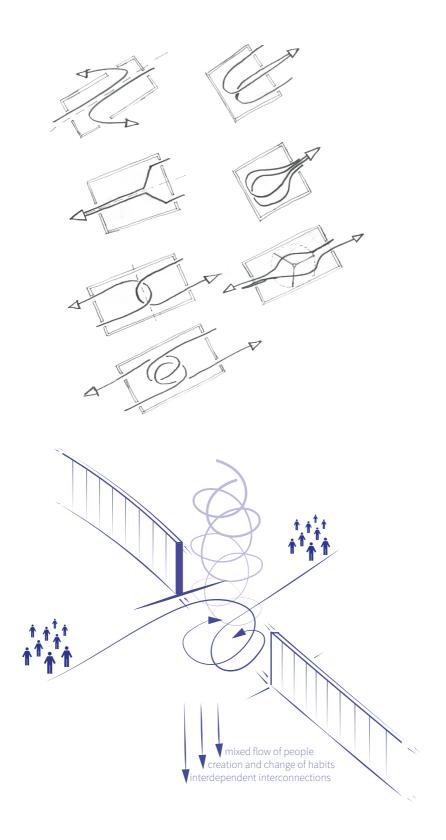
As for the design, several specifications are essential as result of the research.

I believe that - a situation with or without a wall or an administratory division - the Israeli and Palestinian people are segregated in their lives as habits grow. As a reaction to counterattack this segregation, the tolerance towards each other and ability to coexist should be increased.

As a result of the management of hidden layers and within the theme of border-crossing (natural) phenomena, mistrust and misunderstanding are consequences and are keywords within the Israeli-Palestinian conflict.

Mistrust and misunderstanding between people can be diminished by counteracts in the direction of decreasing the segregation and separation, i.e. letting people be in the same space by mixing their flows. From these starting points, the design phase arises.





#### **Evaluation of location**

#### location

The location for the design is chosen based on the outcome of a quick but careful analysis of a selection of places in the area of Israel and Palestine.

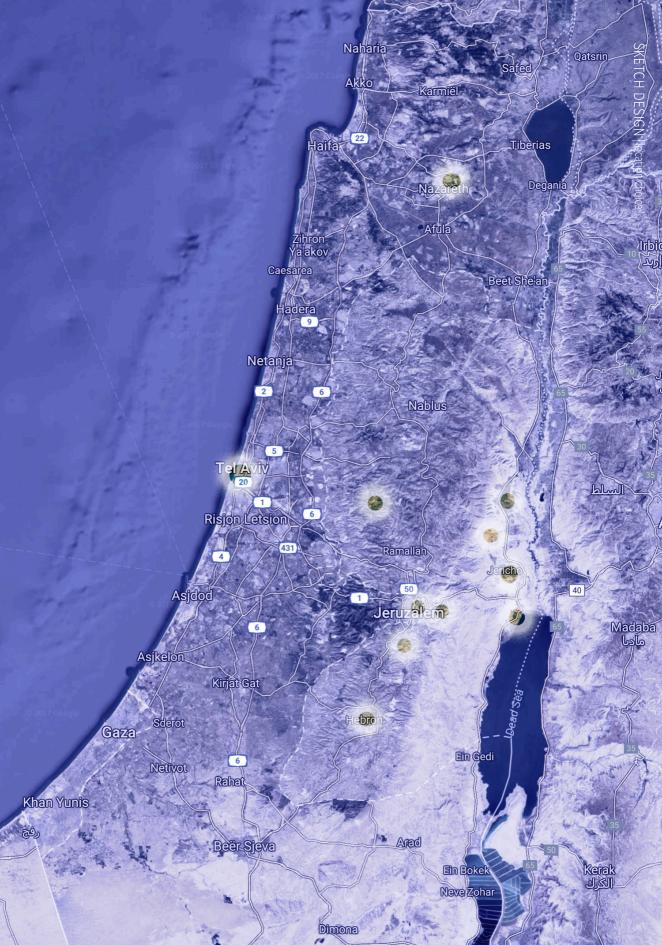
From an open-minded view towards the choice of location, the selection is based on specific qualities of each place, in which an as large as possible variety of key qualities are addressed.

The variety of qualities per place are within the range of sinkholes as result of water problems, territ histo

Based on the scores in the evaluation, and on personal associations and preferences, a selection of three places is established.

onal systems

to agricultural environments, territorial and social disputes and to historical importance of places.  The analysis is a quick scan on the selection of places, assessed and evaluated quantitatively, based on preset specifications.	space of conflict and opposition	permitted mixed flow by law	jewish & islamic presence	segregation and limitations by nati	historically important site(s)	relation to water management prok	evaluation
Tel Aviv			0	0	0		3
Jerusalem	0	0	0	0	0	0	6
Nazareth			0		0		2
Hebron	0	0	0	0	0	0	6
Bethlehem				0	0	0	3
Jericho		0		0	0	0	4
Dead Sea/Kalya		0	0			0	3
Ma'ale Adumim				0	0	0	3
Ariel				0			1
Netiv HaGdud		0	0			0	3
Furush Beit Dajan		0	0			0	3



#### **Competition location**

#### location

From the assessment and evaluation of the locations through a quantitative analysis research, three locations are selected for a price competition.

As for the selection of three locations, external factors such as personal preferences are taken into consideration. The highest amount points from the evaluation are 6 points, for Jerusalem and Hebron, followed by 4 points, for Jericho and 3 points, for Tel Aviv, Bethlehem, Kalya, Ma'ale Adumim, Netiv HaGdud and Furush Beit Dajan.

From a personal perspective, I have chosen to let Jerusalem go, as many people before me already studied Jerusalem extensively - I would like to gain new insights. After Hebron, Jericho has the most points, and then many places with 3 points

follow. As Tel Aviv, Bethlehem, Ma'ale Adumim do not permit a mixed flow of Israeli and Palestinian people, these places will not be taken into account for the selection. Between Kalya and the two agricultural places in the West Bank (Netiv HaGdud and Furush Beit Dajan), my preference and larger interest goes to Kalya at the Dead Sea for its situation with water.



#### Kalya and its qualities

#### location

For Kalya, a small village (or composition of houses) at the Dead Sea, I have created two designs. One design within the cracks of the Judean Desert at the coast of the Dead Sea, the other right at the flatter coastline of the Dead Sea.

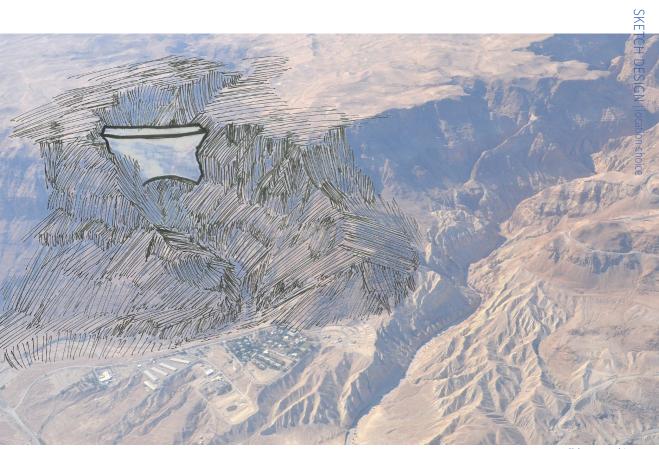
Kalya is an interesting site, as it deals with sinkholes as consequence of the water level decline of the Dead Sea. Also, as the water level declines, tourist facilities once at the beach of the Dead Sea are now miles away from water - and have to cross a landschape filled with sinkholes to reach the water.

Kalya, at the north of the Dead Sea, is the only place at the Dead Sea where both Israelis as Palestinians are allowed to enter the water at the same place and time.

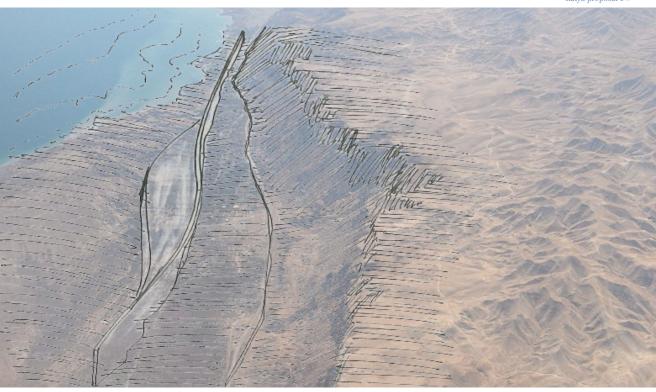
Kalya is close to cities as Jericho and Jerusalem, and is within the proximity of Jordan - Jordan can be seen at the other side of the Dead Sea at a distance of only 15 kilometers.

A design in Kalya can be extremely interesting for the combination of a rough and steep landscape next to the Sea, in contrast with a flat but porous coastline with the change of sinkholes, now and in the future.

Also within the theme of water and the Dead Sea's salty character and skin-caring mud, a potential design faces many opportunities.



Kalya proposal 1 ≈



Kalya proposal 2  $\approx$ 

#### Jericho and its qualities

#### location

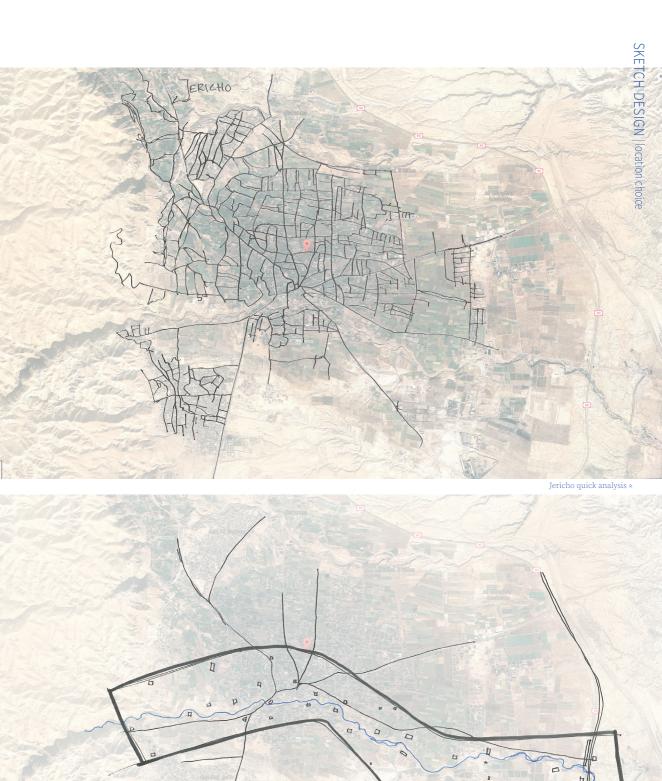
Jericho is one of the oldest continuously inhabited places of the world. Historically, Jericho would have many opportunities.

Jericho is in the proximity of the border between Palestine and Jordan, it is close to Jerusalem and the Dead Sea, and contains lots of history.

The city is built on a relatively flat surface, at the edge of a more mountainous landscape. Jericho is a low-rise city with many agricultural activities. A river goes through Jericho and flows into the Jordan River, to end up in the Dead Sea.

From a quick analysis of Jericho, the city fabric is dissected generally. Radiants from a certain center spread with connecting roads between them. The city is spread widely throughout the flat landscape.

For the design, the features of a small river, a wide spread urbanization and the proximity of important places create opportunities. The presence of bypass roads intersecting with water ways is interesting to think about.



Jericho proposal ≈

#### Hebron and its qualities

#### location

Hebron is a city in a mountainous area in the south and inner region of the West Bank. On only a distance of 30 kilometers from Jerusalem, Hebron is another divided city - but less attention paid too.

Hebron is interesting in terms of it division in areas under Palestinian control and under Israeli control. It is one of the oldest continuously inhabited places in the world, and two shared religious sites between Jews, Muslims and Christians are located in Hebron. As burial place for Abraham and other patriarchs, Hebron is among the holiest sites in Judaism, Islam and Christianity.

Following from a quick analysis of the city fabric of Hebron, it is visible that the built environment has rooted itself in along the ridges of the hillsides. One street in Hebron is significant, as it is closed off for Palestinian access - while it is an important route for Jews and Israeli settlers to go from the east of the Old City to the Jewish cemetery at the west of the Old City of Hebron.

Israeli settlements are in the proximity of Hebron as well as they are within the Old City of Hebron; Palestinians also still have their houses in the Israeli part and live within the same boundaries as the Israelis.

The complex and complicated social context of Hebron has many opportunities for a potential design. As home to holy sites and history going back till far before Christ, Hebron has a lot of meaning.



February States of the Control of th

Hebron proposal  $\hat{\ }$ 

#### And the winner is...

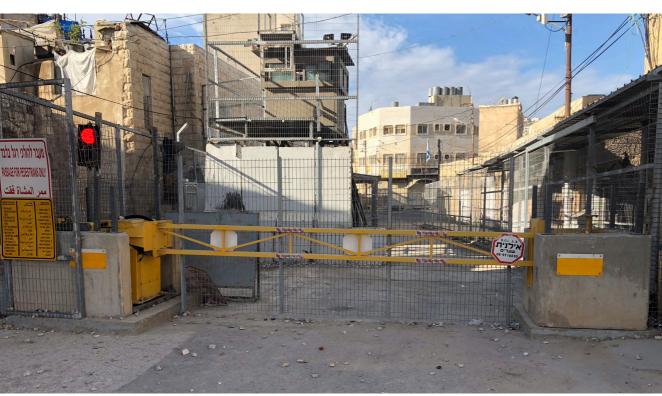
## analysis

Based on the design competition for Kalya, Jericho and Hebron, Hebron is the winning design; thus the place for the graduation design project.

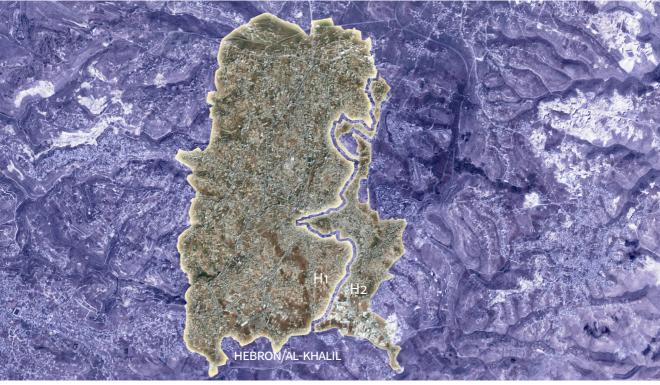
The qualities of Hebron, the complex context, the inequality with regards to movement limitations and the population composition are the most important factors for the choice for Hebron as the site for the design.

## "Never was it this bad in Hebron, microcosm of the occupation"

- Derk Walters in NRC







City of Hebron with its areas in satellite map  $\mathbin{\hat{\circ}}$ 

#### **Shared religious sites**

## analysis

Hebron, or Al-Khalil, is unique in the sense of the presence of religious sites that both Jews and Muslims claim. The al-Arba'in mosque and al-Ibrahimi mosque are shared by both religions of which the last is also an important place in the Christian belief.

For Palestinians, the significant holy site is named al Haram al-Ibrahimi mosque; for Israelis it is the Cave of Patriarchs, or Ma'arat Hamakhpelah.

The holy site, located in het center of the Old City of Hebron, is mentioned in the Torah, Quran and Bible as the burial place bought by Abraham. In the caves underneath the building is Abraham buried, together with patriarchs Sarah, Isaac, Rebecca, Leah and Jacob.

The holy site for the three monotheistic, or abramic, religions is the second most sacred site in Judaism, one of the four holy cities in Islam and one of the important holy sites in Christianity.

Hand in hand with the sharing of the religious sites, is the dispute and contestation of territory and national boundaries in Hebron or Al-Khalil.



Jewish settlement

HI

HI

SHARED

RELIGIOUS SITE

Ordally

Rolestinians

Only Palestinian

pedestrian ages

HI

H2

Hebron Old City analysis of key sites  $\ast$ 

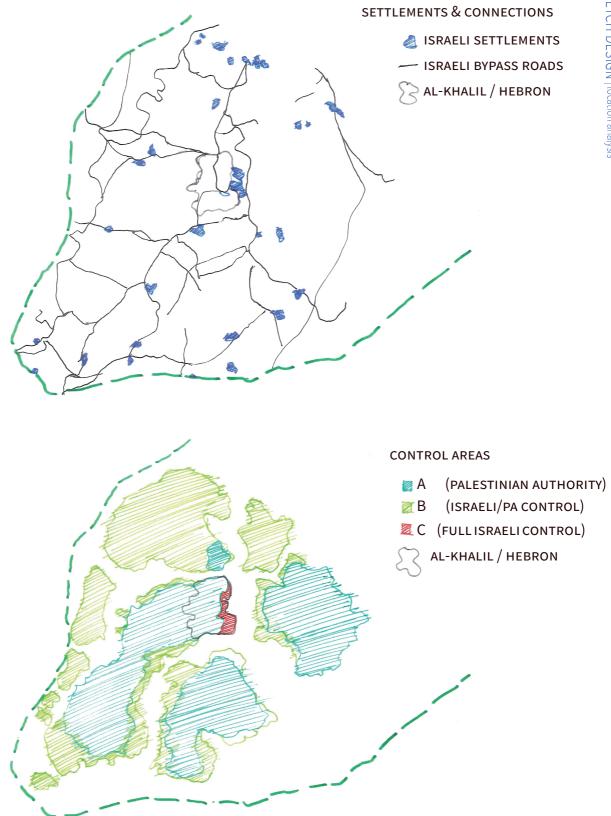
#### Control me or you

## analysis

The Judaean Hills, or Judaean Mountains, is the mountain range at the southern part of the West Bank. Several (biblical) spots, towns and cities belong to this region, including Jerusalem and Hebron.

For Jews, Christians and Arabs the Judaean Hills are important and find their origins in this area. For that reason, the places in this part of the West Bank are largely claimed and heavily disputed.

Jewish communities are settled across the Judaean Hills adjacent to the Palestinian communities. The most interesting case of the southern West Bank, and probably of the entire West Bank is Hebron. Next to the commonly known A-, B- and C-areas that divide the control on the West Bank territory, Hebron is divided in H1 and H2, similar to respectively area A and area C. Hebron's old city and city center is divided in two control areas: none of the other communities at the West Bank have the same situation.



#### Where to go

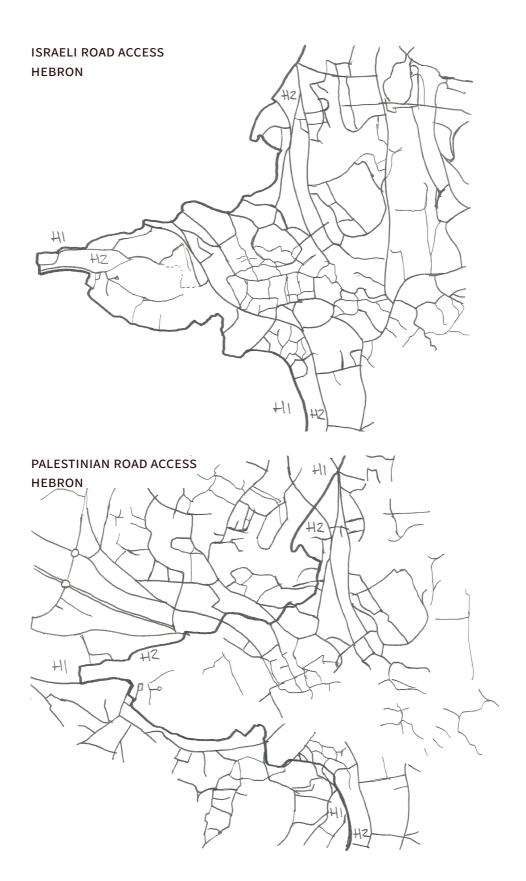
## analysis

In Hebron movement is not always easy or naturally.

As Israelis are not allowed to enter 'A'-areas (nor the H1 Hebron area) by law, the drawn borders on the map clearly define the limitations of Israelis to move around. In Hebron this means that Israelis only have access to the Old City of Hebron and the area to the west exit to Highway 60

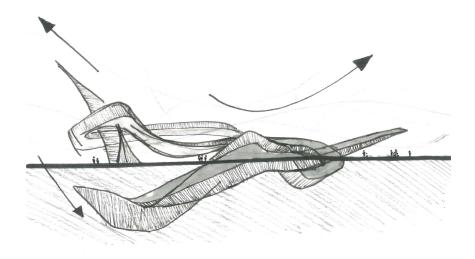
In principle Palestinians are not excluded from 'B'- or 'C'-areas in the West Bank, nor the H2 Hebron area. As the 'A'-area is Palestinian controlled, zero limitations or restrictions are applied to the Palestinians in this area. Contrarily, as area 'C' (and H2) is under full control of the Israeli military, certain parts exclude Palestinians through the application of checkpoints, military posts, watch towers and physical barriers such as concrete blocks, walls and fences.

In Hebron holy sites and areas around Israeli settlements are no-go zones for the Palestinians.

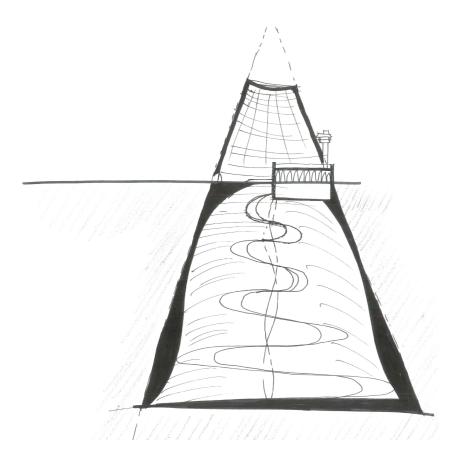


## Research by design

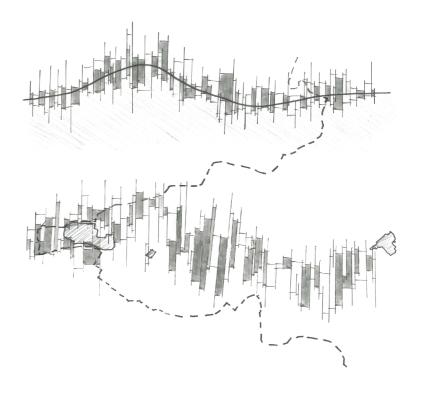
# sketch design



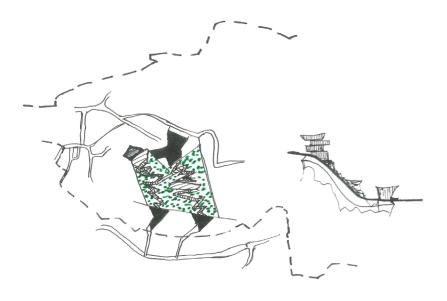
#### **DESIGN 1**



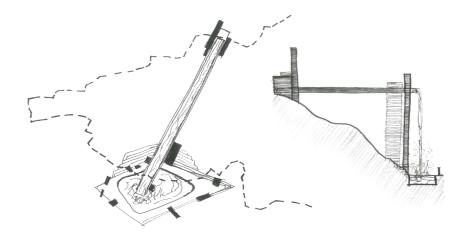
DESIGN 2



DESIGN 3



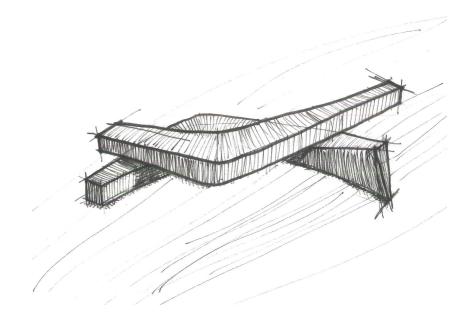
DESIGN 4



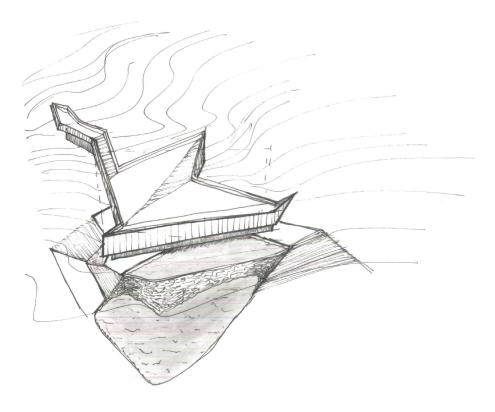
DESIGN 5



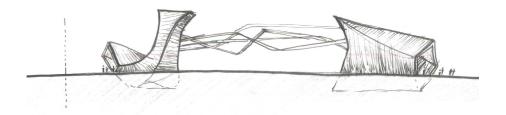
DESIGN 6

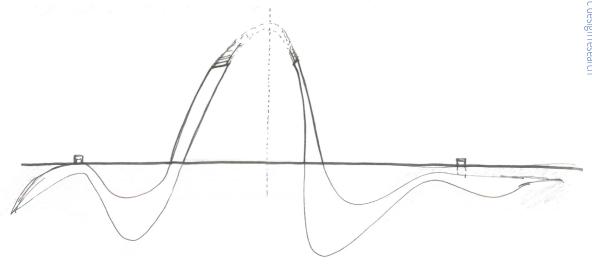


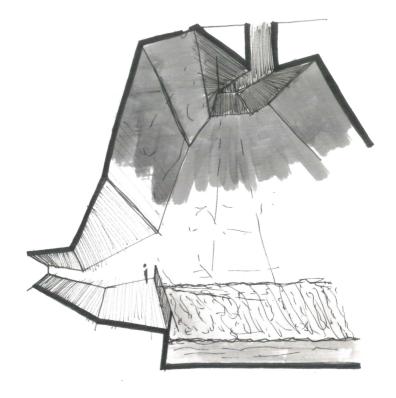
DESIGN 5



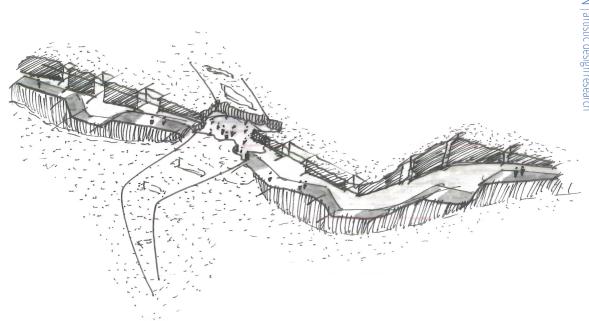
DESIGN 6

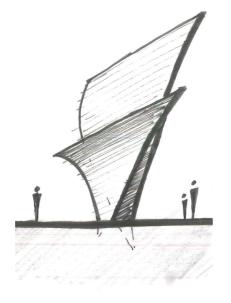


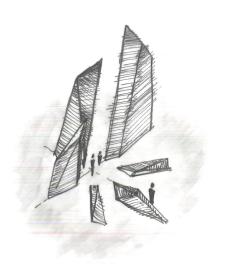




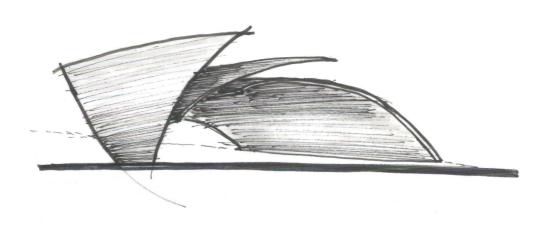
DESIGN 9

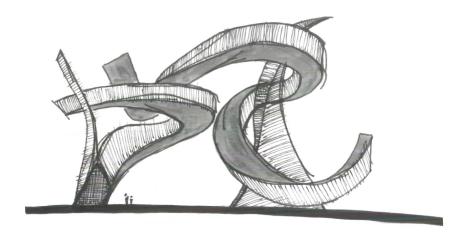




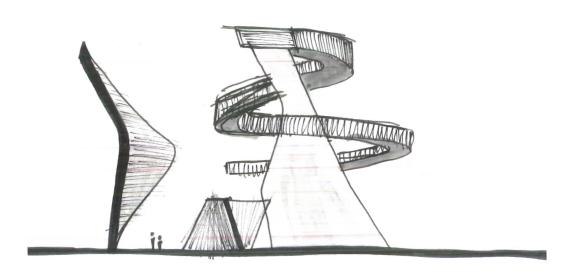


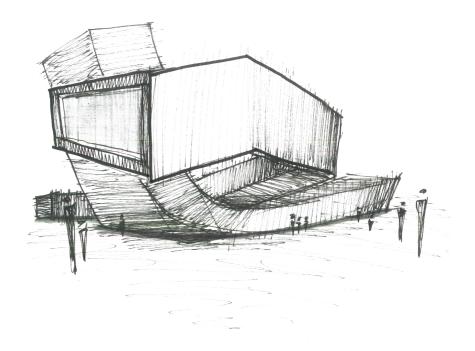
**DESIGN 11** 



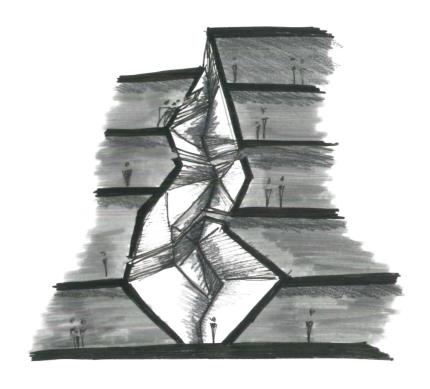


**DESIGN 14** 

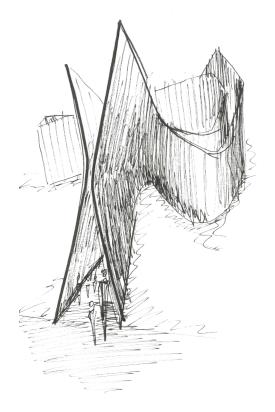




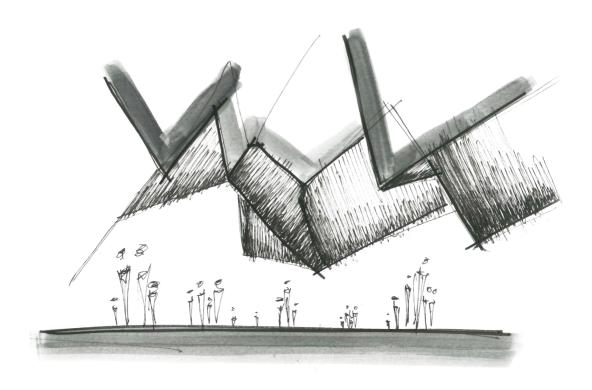
**DESIGN 16** 

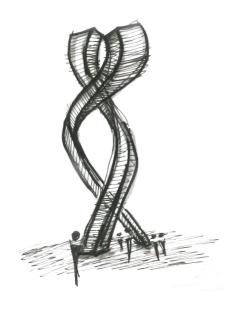


**DESIGN 17** 

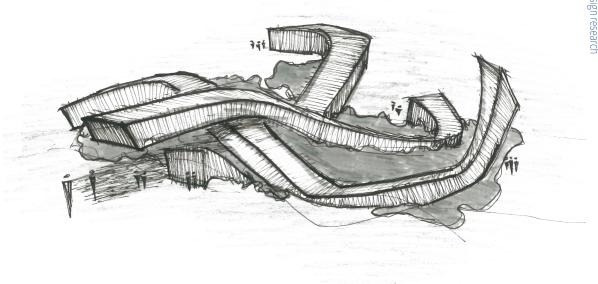


**DESIGN 18** 





DESIGN 20



DESIGN 21

# style/location research conception

### Reflection

### continuation

What is the meaning of Hebron, and what meaning would a project have in Hebron? What choices in the design process have I made, and what have a not yet decided?

As a rewind in the itinerary process of designing I chose to reflect on what is there and on what could be: a time for reflection to clearify, enforce and redefine the choices.

Important in the process of reflection is the decision-making and awareness of the exact location in Hebron with regards to territory, its boundaries and the meaning that any choice would have to one or the other side.



Reflection sketch on Hebron character  $\circ$ 

#### **Hans Scharoun**

## precedent

In contrary to the architecture other techno-rationalism contemporaries such as Le Corbusier. rationalism in design did not begin from a building's fromal disposition but from the architect's handling of human social functions. Hans Scharoun, often called a organic functionalist, building on Durand's ideas that a building's shape and plan suit its projected use. In the time of Scharoun, according to him, a new architecture was needed to serve modern life. In the opinion of Scharoun and colleague organic functionalists, a building's design had to emerge first from the specifics of the site and the program.

For the organic functionalists, designing began from its users, and favored the contingencies of site and patterns of human social interaction. In organic functionalism, pragmatic analysis of the empirical world was revered. Curves were the shapes liked by the organic functionalist.

Essential in the philosophical ideas of the organic functionalism is operating from the premise that the mind can know or excavate its own ideas, that human thought is largely conscious, and that the mind's structure is accessible to itself, a logic-driven approach based in science. Architecture reflects and serves the conditions of modern life, and makers and users of buildings are thinking subjects capable of cognitions dispassionately constructued from rational analysis, and that this thinking subject is categorically distinct from the object-world of other people and of buildings, cities and nature.









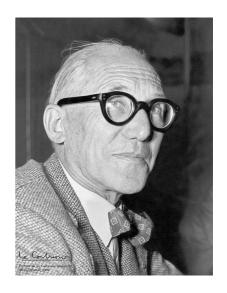
### Le Corbusier

## precedent

Together with Gropius, Le Corbusier insisted upon pressing new technologies into what they claimed were architecture's logical structural, functional and aesthetic ends. This techno-rationalism mandated that architectural design should be developed according to the dictates of the anticipated construction process, preferably mass production. Formally, these technologically-oriented strains of rationalism represent in buildings that are drew from the grid and Euclidean geometry.

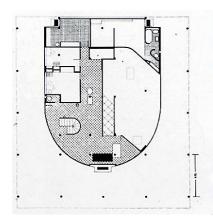
Techno-rationalists began from the object, and employed mathematically-based from al systems of geometry or physics. Techno-rationalism revered systematic, parsed-out logic, and preferred straight lines in the design.

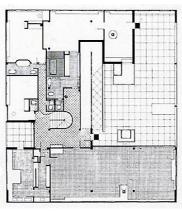
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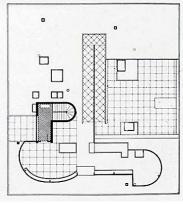












Drawings and pictures of Le Corbusier's architecture  $\mathbin{\hat{\,}}$ 

### **Experience of boundaries**

### space

Space as an area and volume limited by vertical and horizontal elements can take appearance in many ways, having different consequences for the perception, conception and expieriencing of the space.

Therefore an analysis on space and boundaries is omportant as a tool to understand the possibilities, consequences and expectations of choices in the design process.

Different types of spaces and boundaries are defined and physically built in threedimensional space.

The analysis has at outcome a list of consequences of what the spaces and boundaries mean to the feelings of the spectator.





parallel wide space straight boundaries « plan & section





parallel narrow space straight boundaries « plan & section





parallel extra narrow space straight boundaries « plan & section

## space





wide to small space one side tapered boundaries « plan & section





wide to small space inclining/tapered boundaries « plan & section





wide to small space straight tapered boundaries « plan & section

## space





wide to small space tapered & straight boundaries « plan & section





parallel diagonal space straight boundaries « plan & section





parallel diagonal space straight boundaries « plan & section

### Hebron city analysis

### location

Hebron is the largest city at the West Bank with approximatley 215,000 inhabitants. Hebron is one of the holiest places for christians, jews and muslims, and therefore it has become a very complex context. The city is during the Oslo peace talks divided in two areas, H1 and H2, which are under full Palestinian (H1) and Israeli (H2) control.

To understand how the city of Hebron works, the city is analyzed through the use of maps, as shown on the following pages. Please already find an overview map at the right page.

Mapping is essential in the design process and formulation of a narrative. Mapping or making analytical drawings is based on themes and the selection within those themes, and thus quite subjective to the mapper - even when a mapper tries to do it as objective as possible, a sense of subjectivity is present in mappings and analytical drawings.

Through the analytical drawings the items that matter to the mapper are taken out and used as information to build upon.

The analysis of Hebron consists of pulling the city apart in different themes, in which the different drawings highlight and represent different themes.

The different themes in the analysis will be the definition of borders and territories, the terrain, the network of spatial movement, the built environment and its neighborhoods, the shared religious sites and other important functions within the city, the Israeli settlements within the city and the associated limitations in movement through military and politional aspects, as well as what the different aspects mean to the city

of Hebron and its functioning as a city in a split-identity of territories, governance and control.



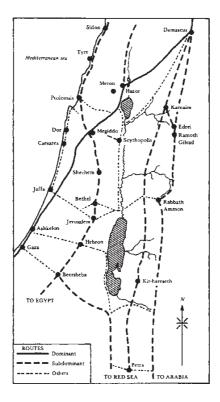
#### **General information**

## location

#### **HEBRON COMMERCE**

Hebron as important city in the Land of the Canaan, important for Judaism, Islam and Christianity, has also a significant place within the commerce in the Middle East.

Hebron is on the Ridge Route (or Way of the Patriarchs), the most important trading route within the boundaries of Historic Palestine, and between the Via Maris (Way of the Sea) and the King's Highway (through Jordan). Specifically the King's Highway and the Way of the Sea connected Hebron commercially to Anatolia, Egypt and Mesopotamia.



#### **HEBRON GLASS**

As for the trading, essential for Hebron's economy and important point in the network of trading, the glass production industry has made a succes in Hebron.

Hebron glass has a bluegreen tint, as a result of the salt-rich desert between Hebron and the Dead Sea. The Hebron glass is produced for drinking and eating purposes, lamps and also jewellery and accessories.

The traditional intense colours of Hebron glass include dark and light blue, turquoise, dark red (Bordeaux), and light and dark green.

The Phoenician Hebron glass also comes in a mix of different colors. In the present, more and more glass is produced from recycled glass.

Even though Hebron glass is still a tourist attraction and has a good reputation by name, there is a decrease in the number of tourists and exports due to restrictions of movement. Thus, the glass reduction has considerably been reduced.



#### **HEBRON GEOGRAPHY**

The zone in which Hebron lies geographically, is mountainous rising up to 1,000m above sea level. The landscape is mostly hilly and rocky and soils are shallow.

The annual rainfall is about 400mm, in which the cultivated area is mostly convenient for olives, grapes, almonds and fruit trees, winter cereals and grain legumes.

The ground consists of hard limestone, covered by the typical mountain soil terra rossa, with a high content of soluble salts. The red color of the terra rossa comes from the high iron context and low organic matter.



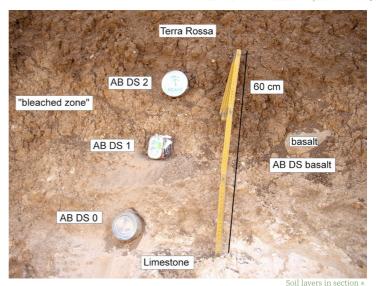
#### **HEBRON DEMOGRAPHY**

Today, Hebron is inhabited by 215,000 people, and with that it is West Bank's largest city. The Hebron Governorate is inhabited 600,000 inhabitants. Hebron is approximately thirty kilometers south of Jerusalem.

Hebron generates roughly a third of the area's gross domestic product, is home to dairy-produces al-Juneidi, has a local reputation for grapes, figs, limestone, pottery and glassblowing factories. Also the Hebron University and Palestine Polytechnic University are located in Hebron



Limestone and Terra Rossa soil of Judean Hills \*





Hebron casbah overview image ≈

#### Areas H1, H2 & C

## analysis

With regards to the division of Hebron into two areas, on the map at the right we can read the boundaries of where areas H1 and H2 are next to each other. Also the other side of H2 is visible, adjacent to area C.

After the Israeli occupation of Hebron in 1967, at the Oslo peace talks, both Israeli as Palestinian parties agreed upon dividing Hebron in two areas named H1 and H2.

The meaning to the areas is based on control and thus access allowance of people. Area H1 is under full Palestinian control; Israeli are not allowed to enter the H1 area. Area H2 is under full Israeli control, similar to the area C policy. In theory, Palestinians are allowed

to enter the areas H2 and C, but are not encouraged to do so. Also, settlements within areas H2 and C are forbidden for Palestinians to enter - checkpoints and/or walls and other blockades keep Palestinians from being able to enter settlements.

Although H2 has many Palestinian sites, the Palestinians are dependent on the checkpoints and its soldiers whether really being able to enter H2 or not.



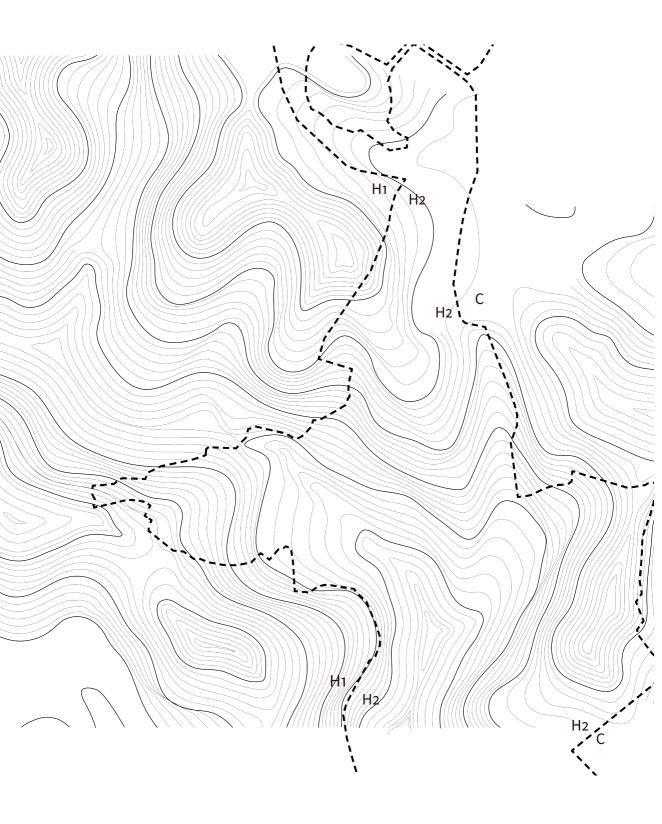


## Up & down

# analysis

The Hebron landscape is visibly a mountaneous area in which hills alternate with valleys, or 'wadis' as they are called in Israel and the Palestinian Territories. The valleys seem to be quite large with steep inclinations towards the rounded hill tops.

The mounaneous landscape is part of the Mount Hebron ridge within the mountainrange of the Judaean Mountains.





### **Network of spatial movement**

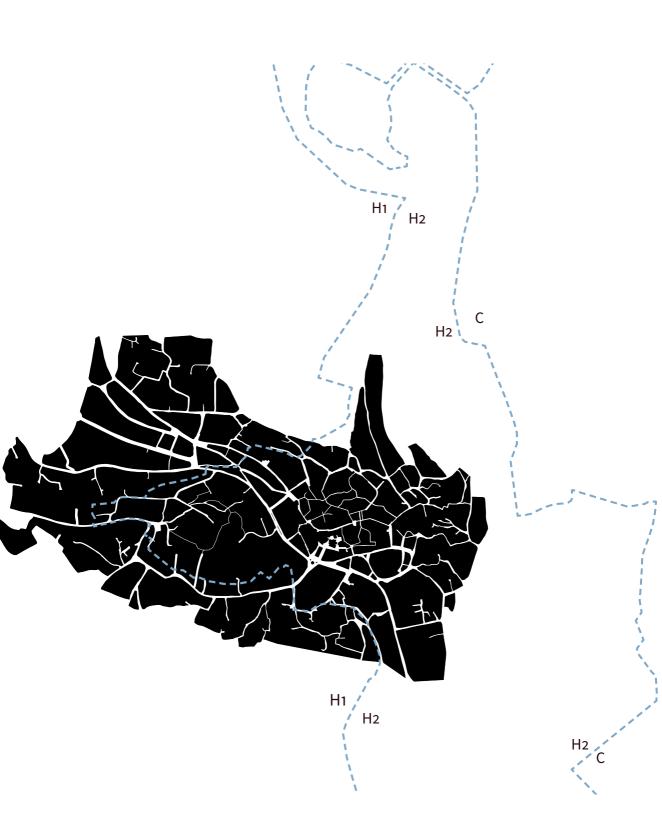
# analysis

As for the understanding of the spatial network of moving through Hebron, the analysis of the network of spatial movement visualizes the urban fabric of the city of Hebron.

The analysis shows that there is no such thing as a grid, the roads and streets rather follow the shapes of the hills on which Hebron is built.

We can find several main roads that connect east with west with only smaller connecting roads or streets between them.

The old city or casbah of Hebron can easily be recognized through its small and interconnecting streets within the tissue of buildings.





#### The built environment

# analysis

The layer of the built environment of Hebron is demonstrated by the analysis drawing at the right. From the drawing, different types of building and structures can be found.

The Old City with its casbah and holy site of the Ibrahimi Mosque or Cave of Patriarchs representate itself through mass volumes in the top-down view. From that point the city revolves around the Old City, following the hill sides of the mountaneous landscape Hebron is built in. The hills are marked within the built environment because of the directional lines of streets and buildings over the lower hill sides through the valley.



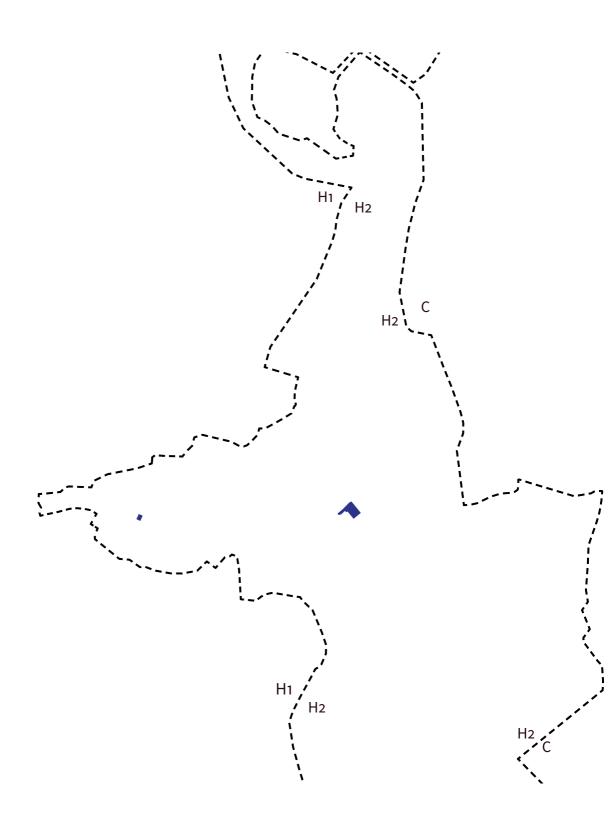


## **Shared religious sites**

# analysis

Within the H2 Hebron area, the area under full Israeli control, two significant and shared religious sites exist. There is the Al-Arba'in mosque, a ruin that is significant as a shared religious site.

Moreover, the most important and significant holy site of Hebron is the Al-Ibrahimi mosque or Cave of Patriarchs. The site is contested by both Israelis as Palestinians, and nowadays has two separate entrances with restrictions on people to enter, based on origin and religion.





### Hebron neighborhoods

## analysis

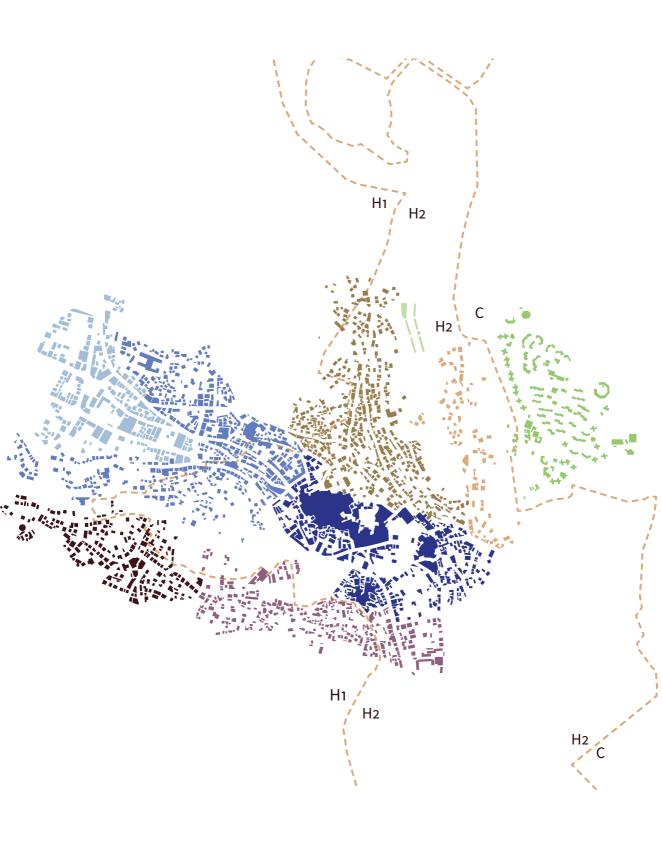
Hebron consists of different neighborhoods, started from the place of the Old City of Hebron. In the analysis, only the surrounding neighborhoods of the Old City are visualized.

The built environment of Hebron clearly follows the ridges of Hebron's hills.

With the Old City and its casbah with narrow streets, the city expanded radially, mostly westwards through the valley and on the ridges of the valley hills.

Bab al-Zawiya has larger buildings and is built within a certain grid. The neighborhood of Bab al-Zawiya represents itself as the center of the Palestinian side of Hebron, within area H1.

Hebron Old City
Haret al-Sheikh
Bab al-Zawiya
Haret al-Sharif
Haret al-Jaabri
israeli settlement Kiryat Arba
israeli settlement Givat Ha'avot
Qeitun
Abu Sheineh





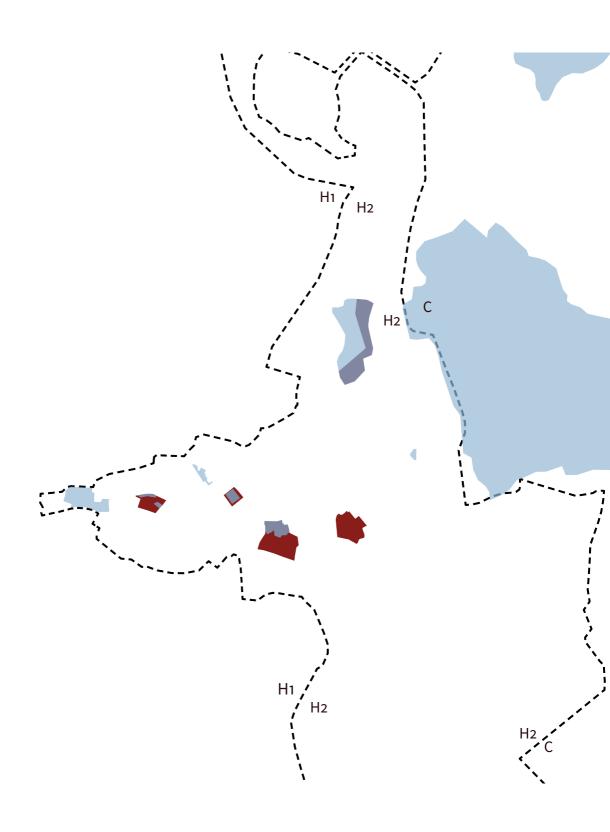
## Settlements and no-gos

## analysis

Within the H2 area of Hebron, and outside in the C area, Israeli colonialists have created settlements in the city. Not only new buildings have been built for these settlements, also Palestinian buildings have been colonialized and Israelized.

With regards to the urban fabric of Hebron, this has a consequence to both Israeli as Palestinian inhabitants. As Palestinians are not allowed in Israeli settlements, this creates holes in the urban fabric and conceived space of Palestinians. Also, around settlements, some areas have restrictions on Palestinian access. Besides, it creates a homogeneous and monocultural space for Israelis in those spaces.

Israeli settlement Israeli settlement Palestinian no-go area Palestinian no-go area



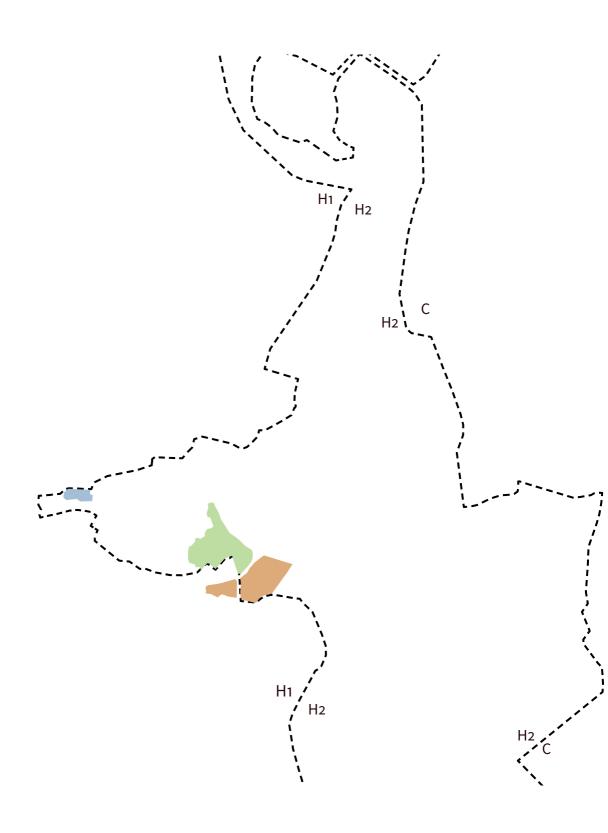


#### **Cemeteries**

# analysis

Around the Old City of Hebron, cemeteries have an essential place. The significance is for the remembrance of the death, but also for the determination of borders - H2 folds around the Jewish cemetery west of the Old City.

The cemeteries are all placed on an important hill of Hebron, Tel Rumeida. The burial places are separated by religion.





#### Places and functions

## analysis

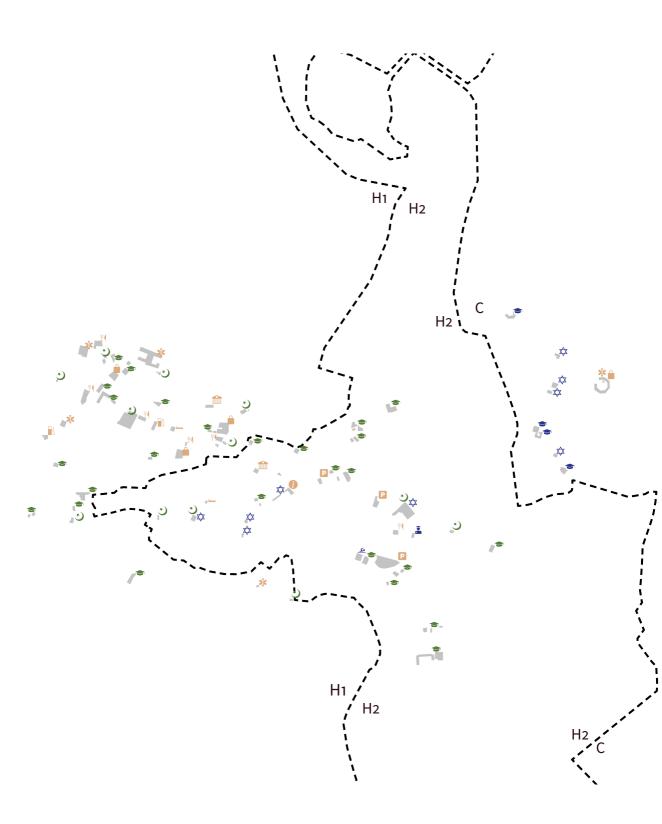
Hebron is an interesting city with regards to its functions and spread of functions in combination with the border between H1 and H2 -determined during the Oslo peace talks.

Many places are segregated based on origin and religion, and thus only accessible for certain people.

Essential within the conflict in Hebron are the 'Palestinian' functions within the 'Israeli' area H2.

Left from the time before the division, mosques and Palestinian schools still take place in Hebron H2. Also, the al-Ibrahimi mosque is in H2. The movement of people in Hebron is thus very interesting.





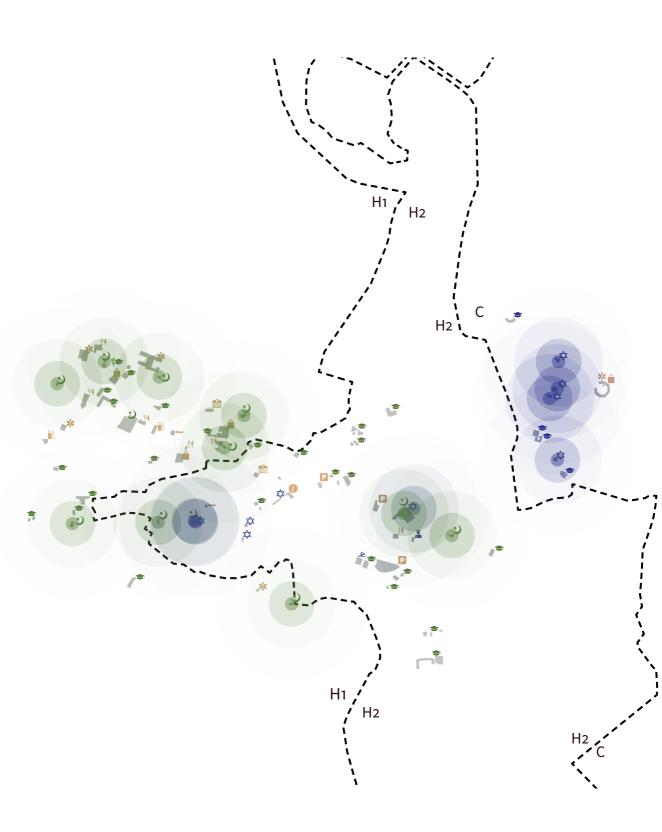


## **Border crossing sounds**

# analysis

The functions in Hebron H1 and H2, and also in area C are placed within the boundaries of a certain territory. Nevertheless, mosques and synagoges call for prayer. In the Israeli-Palestinian case, this is interesting with regards to the borders and the flows that go beyond borders.

The call for prayer is not being stopped by any border, hence it influences life on 'the other side'.





#### **Movement limitations**

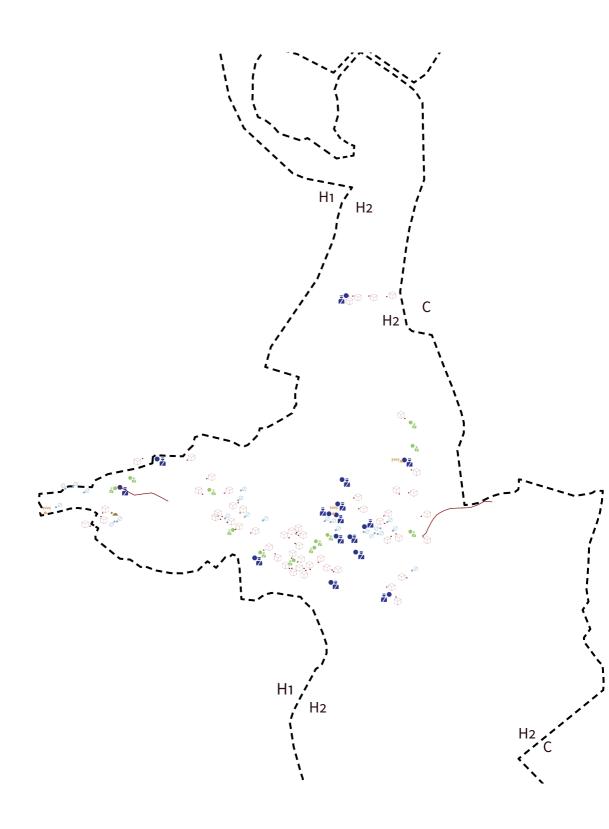
# analysis

Life in especially the Old City of Hebron is characterized by limitations in movement, for mostly Palestinians.

Elements of the limitations are external checkpoints and internal checkpoints. These blockades are controlled by Israeli soldiers, and thus very dependent on what the specific soldier thinks, wants or has to do from higher powers. These blockades can let people pass or can block people dependent on anything. Principally it discomforts.

Other blockades are physical and static, such as concrete road blocks, concrete road barriers and separation barriers, road gates, earthmounds and other barriers and or closures.







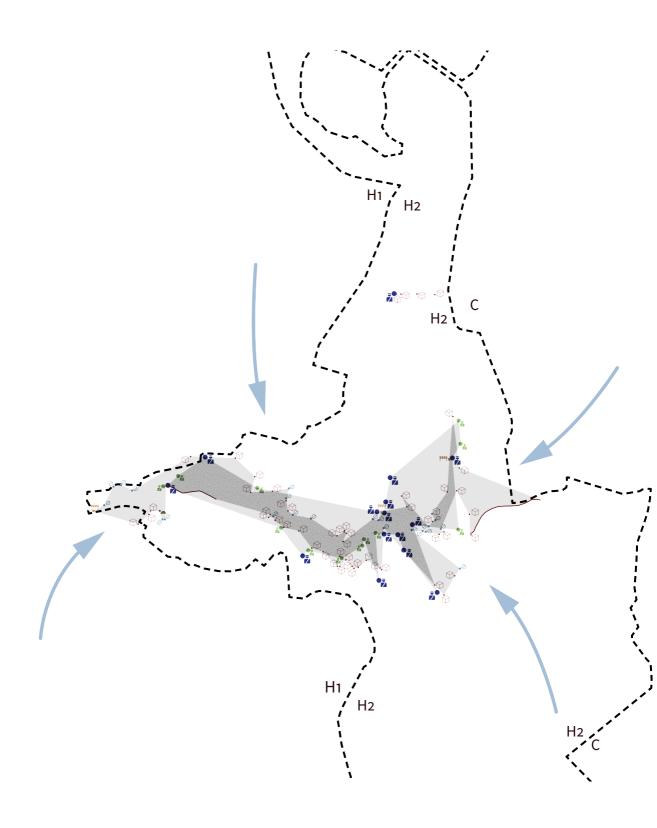
#### Wall of points

## analysis

The limitations and blockades in the Old City of Hebron are points in the landscape, functioning as a coherent system like a wall.

If one would enter Hebron from outside the Old City, with the purpose to go to the Old City, one would face limitations and blockades.

Theoretically we can draw the wall of checkpoints and the wall of static physical blockades by connecting the dots, which define the outer lines of limitations and blockades of the Old City. This theoretical drawing defines the 'walls' around the Old City which one would face when entering the Old City. As the wall of checkpoints and the wall of static physical blockades are overlayed, also an inner space for free movement is presented.



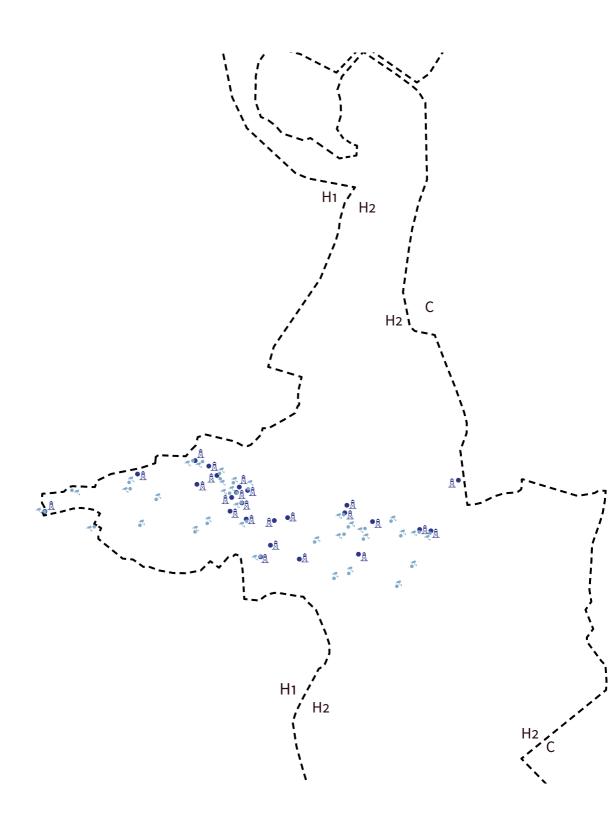


## Big brother is watching you

# analysis

The city of Hebron is not only limited by limitations and blockades, also the people are controlled visually by watch towers and cameras.

Principally around the Israeli settlements, many watch towers and cameras are placed for the protection and security for Israelis, or for control and dominance over the Palestinians.

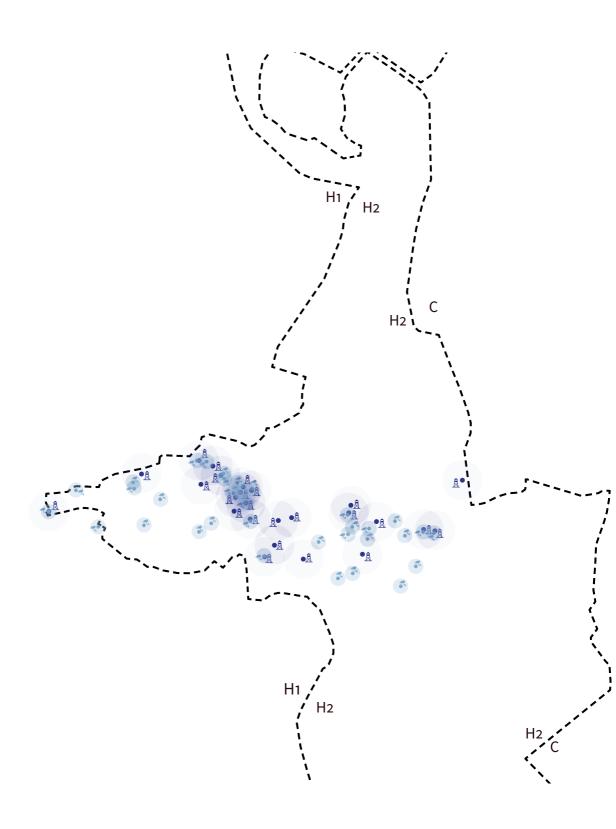




## Eyes in the back of your head

# analysis

As we draw radial circles around the watch towers and cameras, the analysis shows the impact of visual control in the city. Many inhabited places around Tel Rumeide are within the range of the watch towers and cameras, hence most of the Old City is under control of the Israeli military.

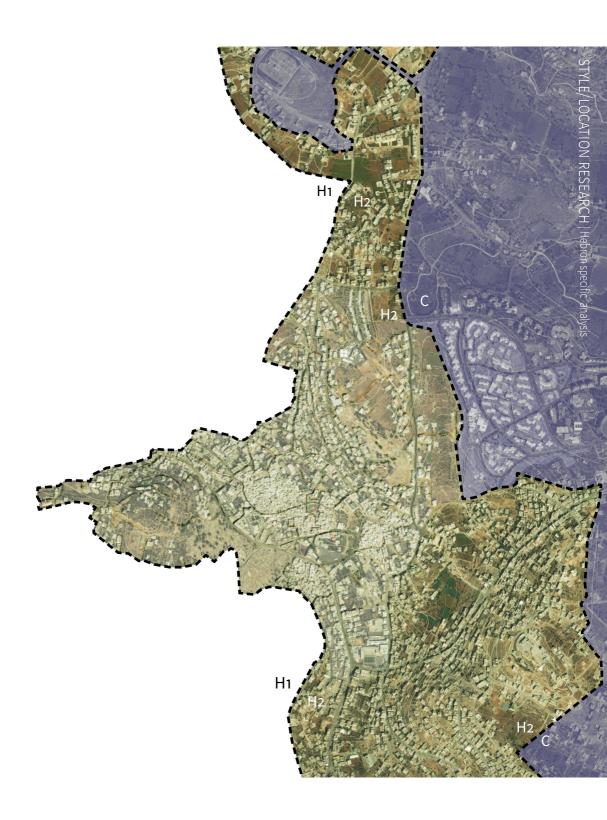




#### Israeli access allowance

# analysis

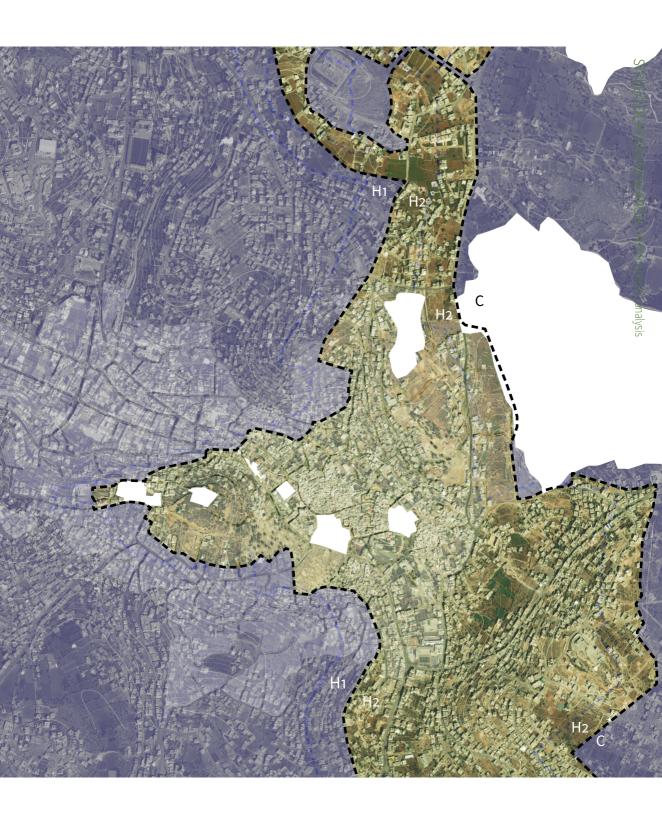
As for the visualization of the access allowance of Israeli citizens in Hebron, the analysis shows the rigorous access disallowance in the H1 area of Hebron. Although Israelis might be seen as the preferred people, dominating the Palestinians, also Israelis face limitations in movement at border situations, and are not in complete freedom.



#### Palestinian access allowance

# analysis

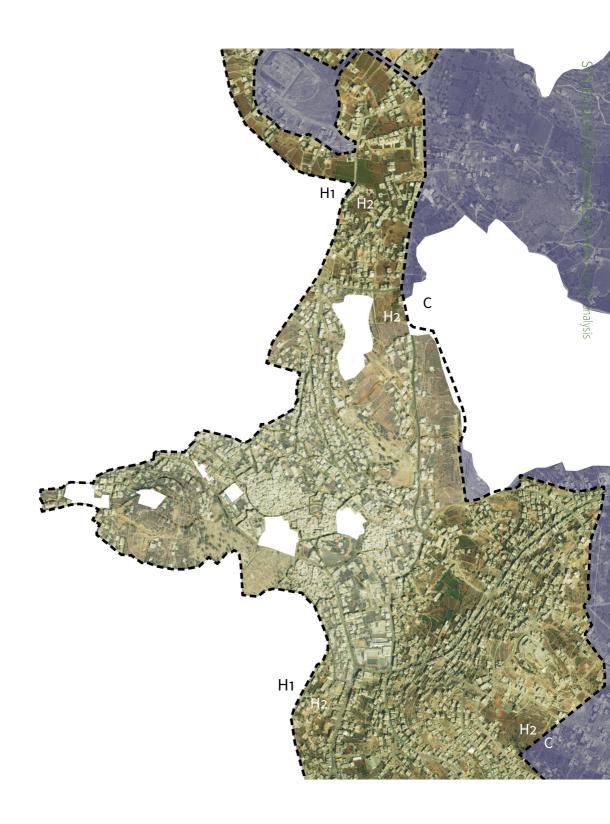
The Palestinian access allowance in Hebron is quite complete, except for the Israeli settlements and some areas around the Israeli settlements. The analysis clearly shows the urban fabric defined by gaps in and around the Old City in H2, at the place of the Givat Ha'avot settlement in H2 and the Kiryat Arba settlement in area C.



#### Communal access allowance

# analysis

The synthesis of Israeli and Palestinian access allowance in Hebron, shows a map with a lot of gaps. In the theoretical case of a double nationality of Palestinian and Israeli citizenship this is how their map would look like; for a Palestinian and Israeli in a relationship, this would be the map if they would move together.



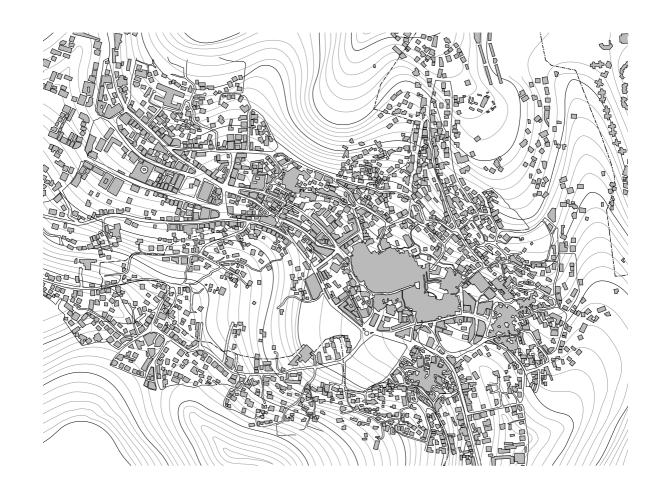
# preliminary design conception

## **Design start**

# design

In the road to a final graduation design, I started with recapturing the ideas from the research of the themes, the outcomes of the theoretical research, the location-specific findings and the personal ideas on the matters and architecture.

From the results of the research and the contribution of personal ideas, an concept is made for the design to start from.



#### Concept

## concept

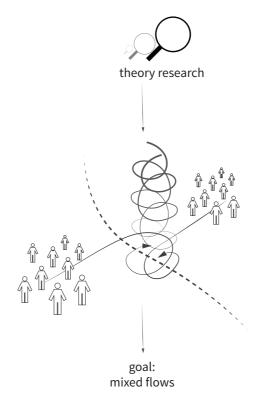
The concept of the architectural design for Hebron comes from the contextual analysis of Israel and Palestine and the Hebron-specific analysis. To take away mistrust and misunderstanding, several specifications are essential for the increase of tolerance towards each other and for the increase of the ability to coexist. Key aspects are the equalization of different people, common identity-building and the creation of mixed flows of different people.

From the analysis, I have come to the conclusion that Hebron with its checkpoints and other physical separation barriers theoretically works like a walled city - however without the physical presence of walls as we are used to.

The Hebron theoretical walls represent the unequal accessibility to the space within the walls. However Israelis are little prevented from accessibility to the space within the walls, Palestinians' accessibility is highly influenced by the Hebron walls.

The Hebron theoretical walls are interesting in the sense of their existence.

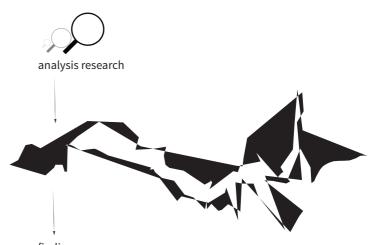
The walls are built up from the points of movement barriers that work systematically and coherently



as a larger system - the Hebron walls.

The Hebron walls are built up of static and dynamic walls, defined by their properties. Physical barriers in in the streets, embodied through concrete blocks, earthmounds, and other blockades and closures are defined as static points for the static wall. The internal and external checkpoints are defined as the dynamic point of the dynamic wall. The barriers of checkpoints are highly influenced by external parameters, including personal opinions of the military guards.

The Hebron theoretical walls however not existing as walls as we know them - have none of expression or representation within the city, except for the actual point cloud of barriers.



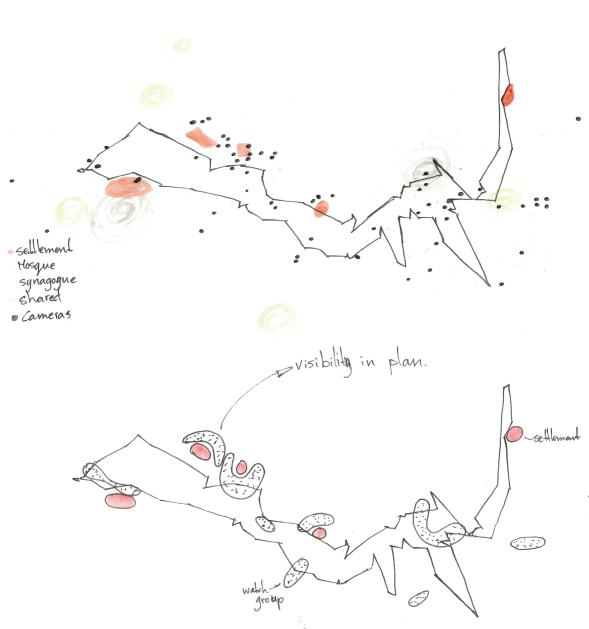
finding: hebron theoretical walls

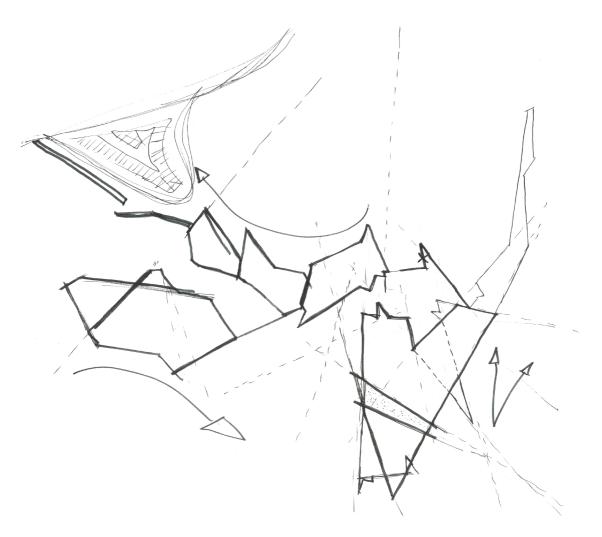
unequal accessibility to space within walls static and dynamic conditions of movement limitations

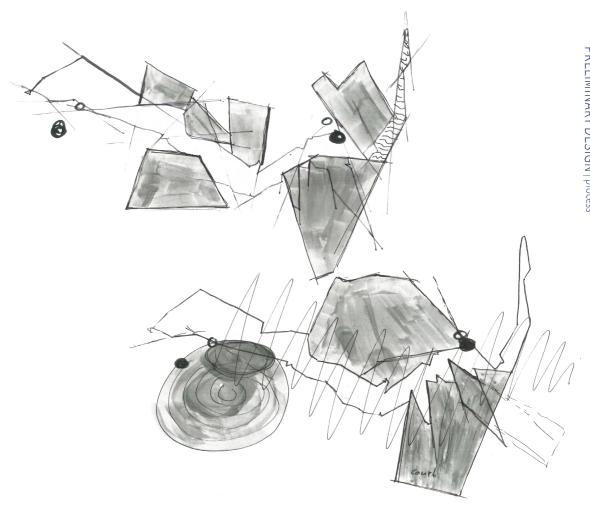
## **Exploration of shape**

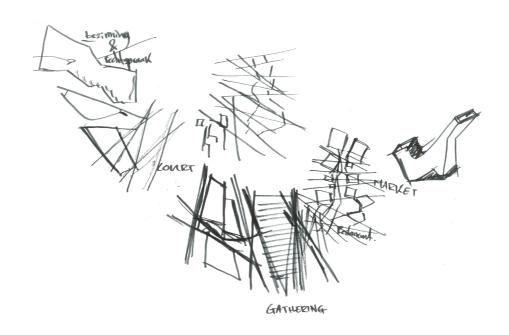
## process

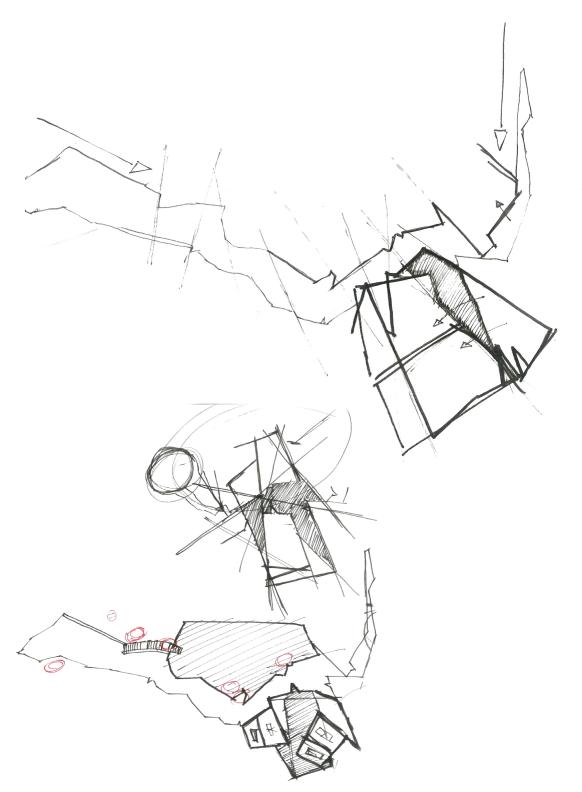
With the findings of the research, the sketch and design process was important to further develop the project, narrow down the scope and define the parameters.

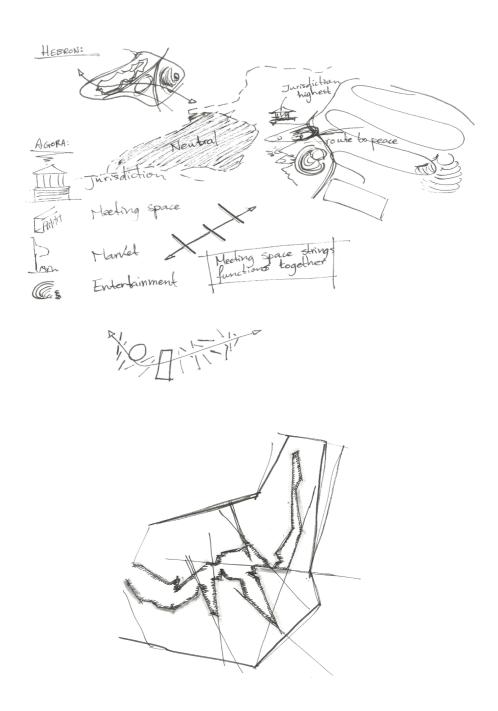


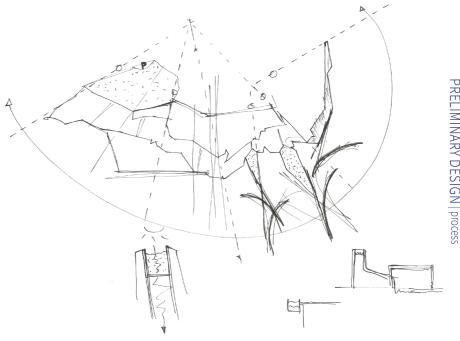


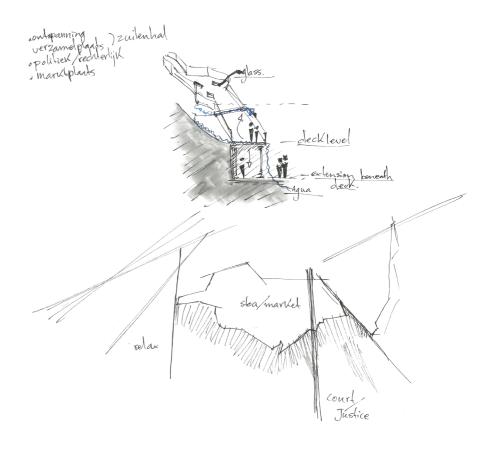


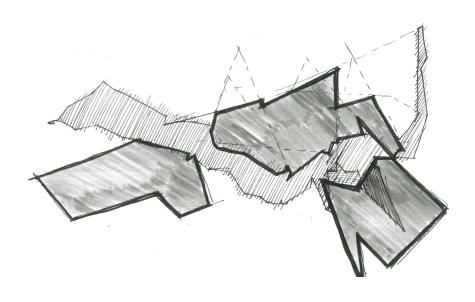


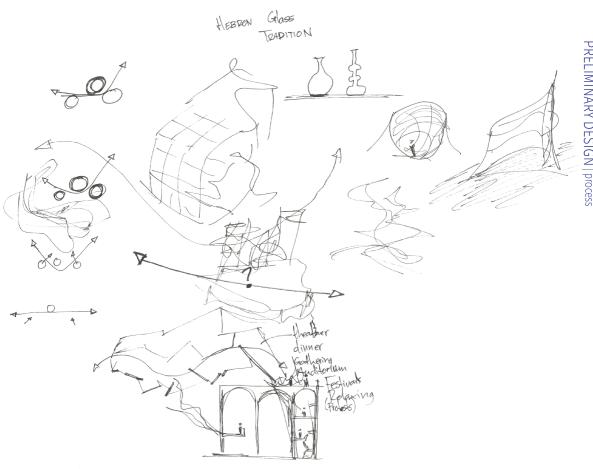


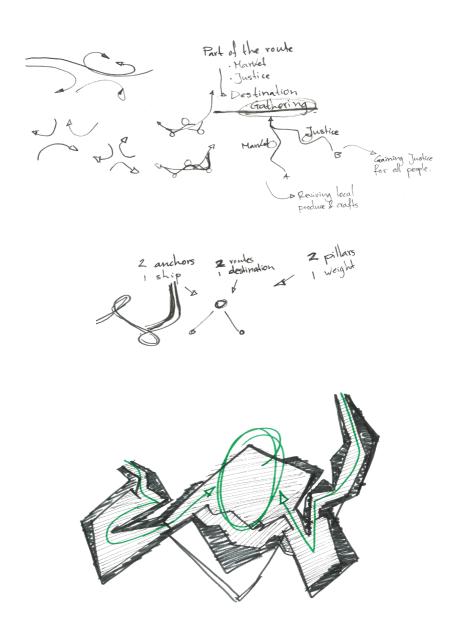


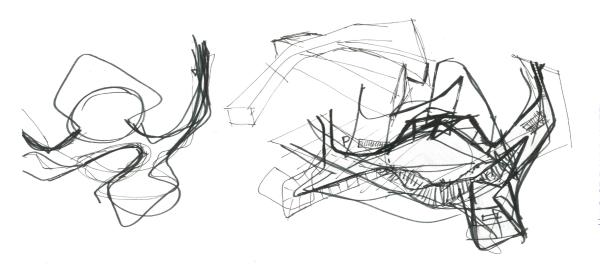


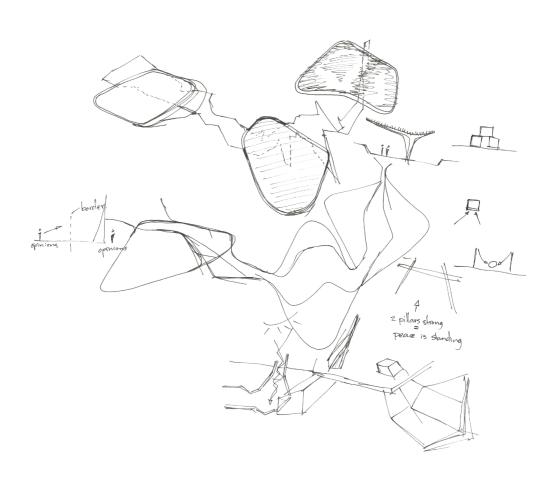












#### **Strategy: city-wide interventions**

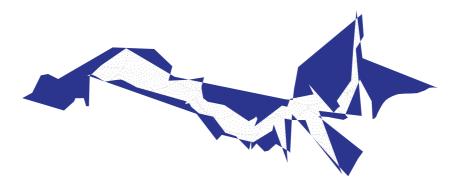
### concept

The overall strategy for Hebron will consist of a number of interventions that connect to the inhabitants' (collective) identity and aim to create a space for gathering, tolerance, and the ability to coexist.

The theorethical Hebron Walls will be made visible throughout the city as the awareness of the current conditions and as reflection to the current conditions (perhaps to the fresh past conditions at the time being).

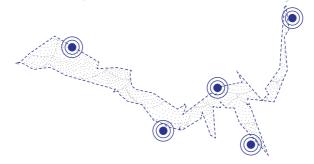
Points at the space within the walls will function as starting points or catalysts for the space for gathering. These connection points are the starting points for the transboundary movement. The catalysts are stretegically placed and themed for the equalization of the groups of people.

Five themes will work together to equalize the society and bring people together. Essential in this are the revival of the local economy, the equalization of rights, an equal allocation of water, a decrease (and eventually abandonment) of movement limitations and a direction in politics towards peace.



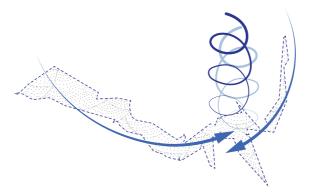
#### visibility of hebron walls as:

awareness of / reflection to current conditions (perhaps future past conditions) relation between architecture/urbanism and inhabitants' collective identity



#### points at space within walls as:

starting/connection points for transboundary movement strategically placed and themed catalysts for equalization



#### space for gathering within walls through:

revival of local economy equalization of rights equal water allocation decrease of movement limitations towards peace in politics

#### Strategy: city-wide interventions

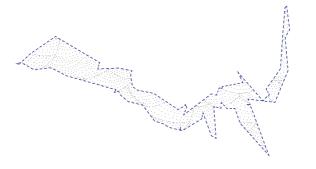
### concept

The theoretical Hebron Walls will be made visible in the physical space through demarcating the space.

The Hebron Walls will be demarcated through the architectural embodiment of the drawing. This results in difference of paving at the line of the walls, but also in objects at the lines that function as a monument or memory to what was once there.

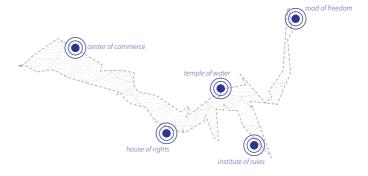
Supporting functions in the means of catalysts also demarcate the space. The Center of Commerce, House of Rights, Road of Freedom, Institute of Rules and the Temple of Water are the architectural objects that work as catalysts and starting points for transboundary movement, tolerance and the ability to coexist.

Through time, the walls fade and retract until no clear limitations are present in the City of Hebron.



#### demarcation of space within hebron walls through:

supporting functions as catalysts architectural embodiment



#### demarcation of space within hebron walls through:

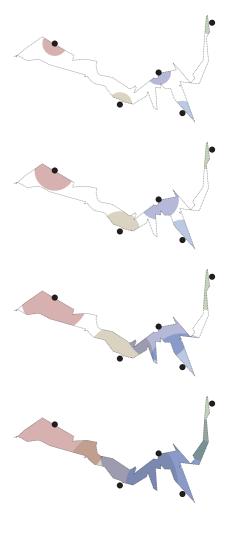
center of commerce house of rights temple of water road of freedom



fading and retraction of hebron walls through time

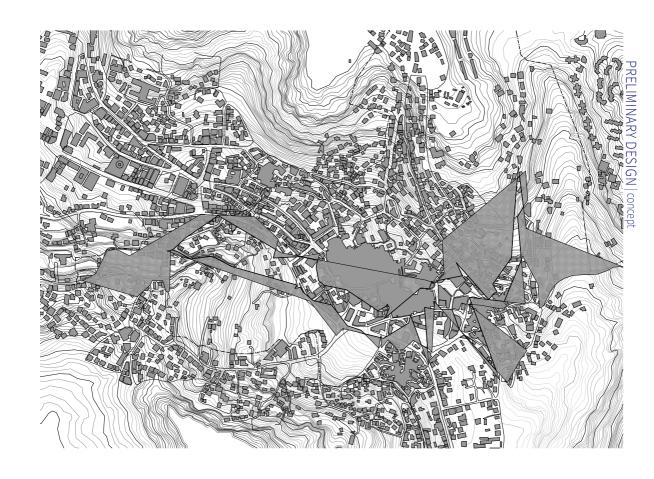
## **Strategy: city-wide interventions**

# concept



The catalysts function as a rhizome system. All of them are placed on a distance from each other. Through time, the collective ideas, memory and identity will be spread through the city as underground roots that pop up above the ground surface every now and then.





### **Design: background**

### concept

What is the role of water in Israel and the Palestinian Territories, and what are the consequences?

On the one hand water is used as a tool for control, both visibly and invisibly. Water is used as a tool to protect from protest. The supply of water and building of water networks can be diminished as a sanction onto others.

On the other hand, the resilience of the Palestinian society creates new solutions as a reaction onto the lacking of water systems. Water tanks are built on the top of the

houses and trucks with water tanks are driving through the communities to provide the people with water.

"The Hebron Area is actually in need of 25,000 cubic meters every day"
- United Nations, 1992





Images of what some may call the tools of Israeli occupation  $\mathbin{\hat{\,\,}}$ 





### Design: background

### concept

The small supply of water to Palestinian communities translates to specific ways of functioning of society.

Childern carry around water tanks, water provision installations are built on town squares, people

bath in small water ways and water comes from bottles instead of faucets.

### "Some families in Hebron have been without water for over 40 days"

- Local Palestinian Journal





Images of water systems at Palestinian householdings ≈

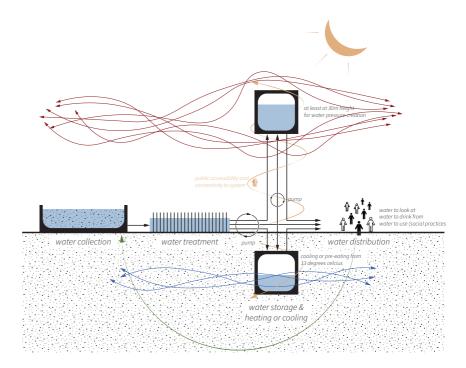






#### **Temple of Water**

# design



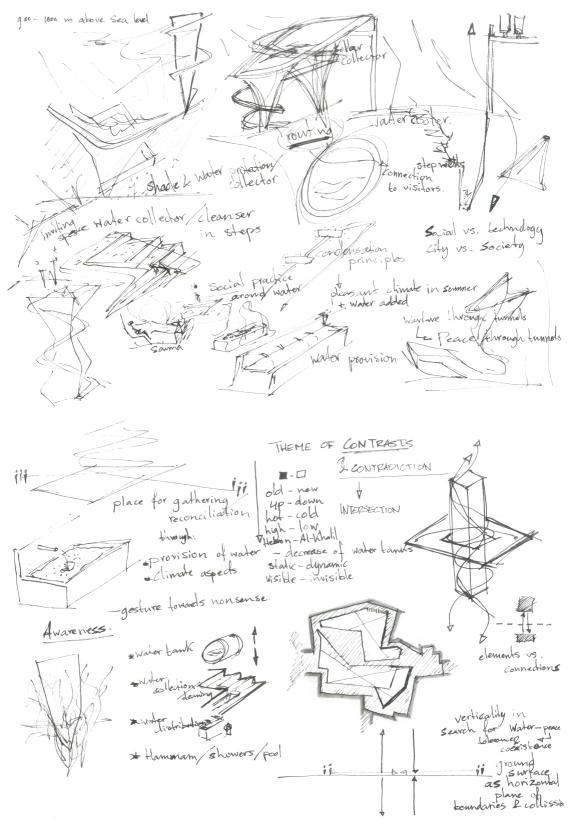
The Temple of Water arises from the technical concept of the functionality, needs, and effects of water as the Architecture of Water.

The Temple of Water, as the new space for the practice of (new) habits by both the Israelis as the Palestinians is the connecting jewel between the segregated societies of Hebron in the Old City of Hebron. The Temple of Water will be the space for both the Israelis and Palestinians to worship and cherish water, understand the working of water and feel the importance of water in any of its existentialities.

The Temple of Water as Architecture of Water with the provision of public accessibility and public tangibility.

The Temple of Water

foresees in the collection, purification, storage, cooling, heating and distribution of water, in coherence with the provision of space for interaction.



#### Historical importance water system

### importance

The value of public functions in the water system is proven in history.

Most significant European examples are the Roman bath houses and public water wells at medieval town squares.

Water towers in the United States of America have become part of their very own architecture heritage for their distinct and sometimes from outer space design; besides the water towers have become symbols in the landscape and for the communities. The towers express their ideas through its design and are the very best spot for merchandising.

The qanat system of Iran is exemplary for what water systems mean in the landscape and can mean for communities. The ancient Persian system left traces in the landscape through lines of dots that represented the vertical shafts into the ground. Gardens and associated buildings (Kariz) stored the water and kept it cool and fresh before distributing to the city or village and its people.

Water and its system(s) have a great value in society. People understand what the systems are for and are in that sense connected emotionally to the systems. The value is in the importance and significance of water in people's lives.



# Embrace diversity: (un)divided Hebron TEMPLE OF WATER

#### narrative

1923:

Hebron - or Al-Khalil in arabic means 'friend', named after Abraham the 'Friend of God', important for Christian, Semitic and Islamic faith. The remembrance of Abraham is still in Hebron through the Cave of Patriarchs, Abraham's burial place. The remembrance lives on as the Al-Haram Al-Ibrahimi for Muslims and the Ma'arat HaMachpelah for Jews.

Hebron is mostly inhabited by arabicislamic people, but lives conjointly and peacefully with some Jews. Hebron is important to both Muslims and Jews, which live together in Palestina as Palestinians.

#### 1967

Hebron has changed, life in Hebron has changed and is going to be changed. Jews, or Israeli, have been banned from Hebron till now, but 'Israel' has conquered areas of Palestina, including parts of Hebron.

Israeli settle in Hebron to be close to the burial place of Abraham, in the city center that is already inhabited by Arabs, or Palestinians.

Israeli and Palestinians live no longer friendly, peacefully and tolerantly together. The new presence of Israeli is hostile and undesired. The conflict in Hebron really starts.

#### 2017

Hebron 'celebrates' its 50th anniversary of the presence of Israeli -embodied in number of inhabitants, settlements and military forces. Palestinians and Israeli have not yet come to the point of living together peacefully, and tensions between the people go up and down.

Ever since the Oslo Accords, Hebron is divided. Hebron is divided in control areas H1 and H2, in which the old city lies within H2 - under Israeli military control.

The city is deadlocked in the ideas of 20 years ago, in which the H1 and H2 areas were decided through Palestinian PLO chairman Arafat and Israeli prime minister Netanyahu under the United States of America supervision at the 1997 Hebron Protocol or Hebron Agreement in accordance with the 1995 Interim Agreement on the West Bank and the Gaza Strip (Oslo II).

#### 2018:

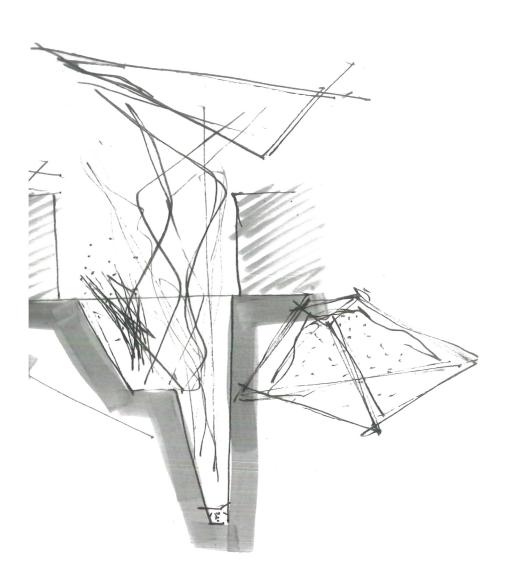
I believe that a two-state solution is not far away from where we are standing now. Although Trump recently officially recognized Jerusalem as Israel's capital by replacing the U.S. Embassy from Tel Aviv to Jerusalem, I would argue that peace is still an option in the near future. Abbas and Hamas have come to peace with each other: Israel and Palestine have not been in major conflict over the last past years. Also the sentiment amongst Israelis and Palestinians tends towards tolerance and coexistence more and more.

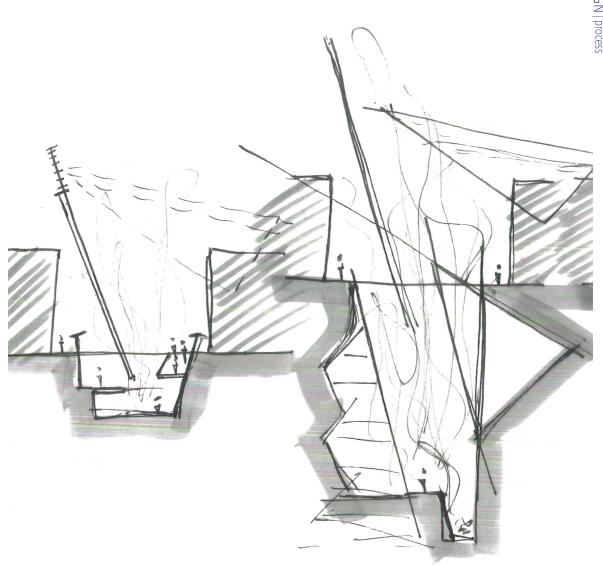
Nevertheless, whether there might be a solution on the political level, the coexistence should also be fed bottom-up. The people in the street need to have full tolerance towards each other; mistrust and misunderstanding should be taken away.

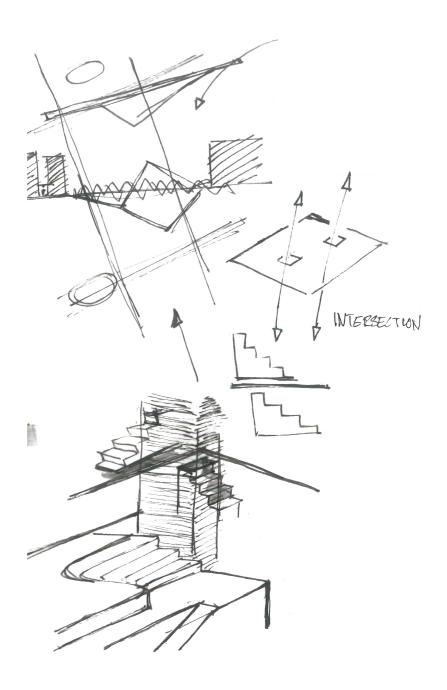
In the creation of a collective identity and within the building of who and what people are, the space within the theoretical Hebron Walls is embodied architecturally, and five points at the inside space work for the creation of transboundary movement of which this graduation project focuses on is the Temple of Water. The Temple of Water is the connection between the Israelis and Palestinians, the platform for mixed flows of people with the goal of communal worship, adoration, and understanding of water and the feeling of the importance of water in any of its existentialities. Moreover, the Temple of Water provides the people not only of space for interaction and practicing of habits, it is also the system as Architecture of Water that distributes water amongst the people, and re-uses the water of the people in Hebron.

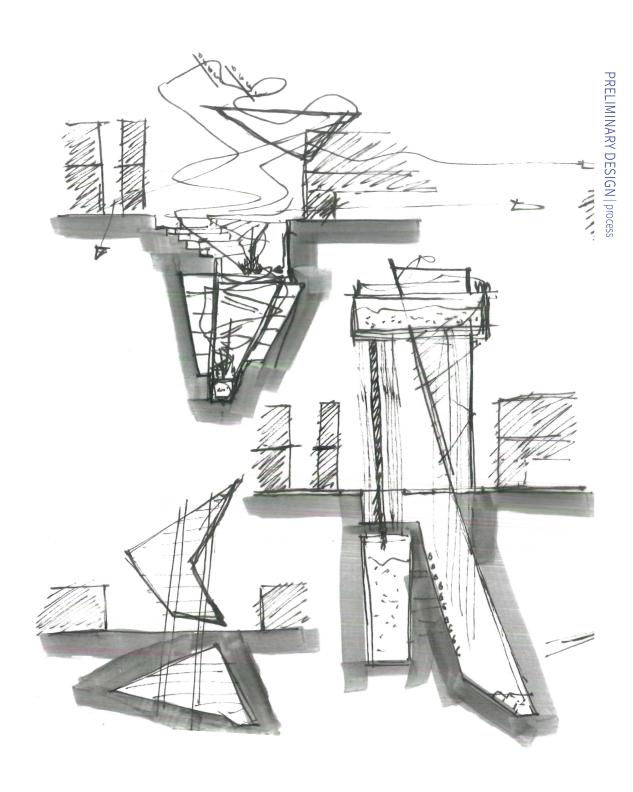


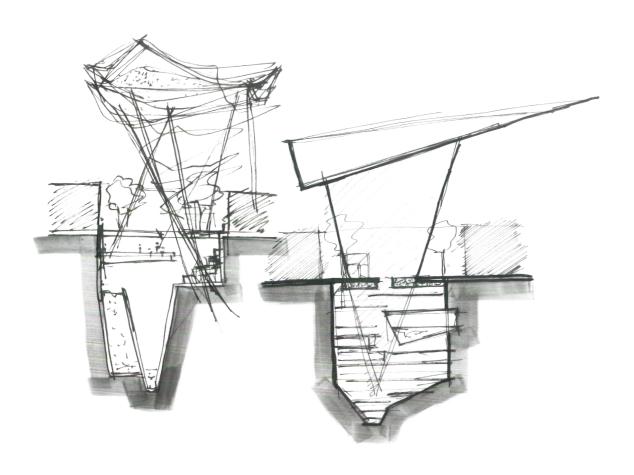
View on the mountainous desert in the proximity of Arad \*

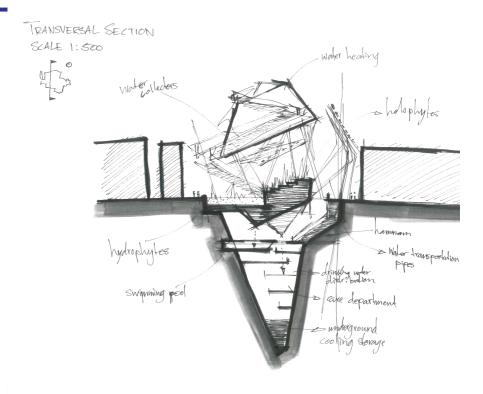


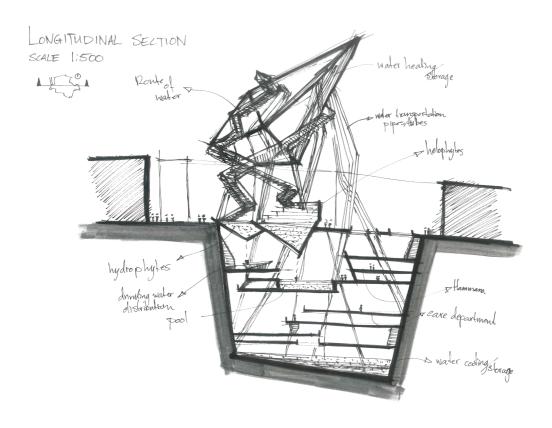




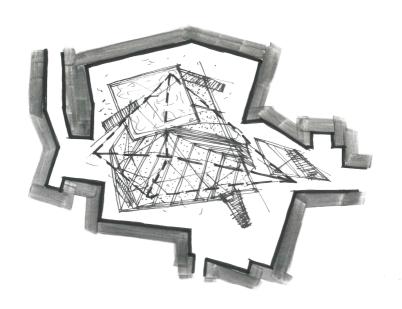








FLOOR PLAN- GROUND FLOOR SCALE 1:500



# elaboration

Embrace diversity: (un)divided Hebron
TEMPLE OF WATER



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contents

#### read online



#### Introduction

#### elaboration

From the conception of the design, the part of elaboration demonstrates the development of the graduation project design.

Through an extended research into the qualities of the site, building specifications and needs, the building shape, concept and elements, the design is further developed.

The design development is divided in two phases or parts, part I and part II - in chronological order.



# design development I elaboration

## **Space and dimensions**

## program

First step in the definition of the project, a first scheme is created with a projection of possible square meters per function.

Based on this first scheme design can be made and feedback to the scheme can be given to further redefine all the requirements for the building.

PROGRAM REQUIREMENTS	concept				
November 5th, 2017					
function		#	sqm/unit	sqm GFA	GFA
	in detail				subtotal
Water deficit WHO					1.264 sqm
	volume of water needed daily	1	45.000.000	liters	
	in square meters:	1	1.264	1.264	
Hazardous water					<b>150</b> sqm
	ground surface	1	150	150	
Water bar					<b>155</b> sqm
	kitchen	1	35	35	
	bar	1	25	25	
	terrace	1	75	75	
	restrooms	2	10	20	
Spa & care					<b>870</b> sqm
	entrance/lobby	1	250	250	
	changing rooms (separated)	2	50	100	
	showers	2	50	100	
	massage area	2	75	150	
	pool	1	200	200	
	restrooms	2	35	70	
Water purification					<b>300</b> sqm
	helophyte filtering	1	50	50	
	hydrophyte filtering	1	50	50	
	hemicryptophyte filtering	1	50	50	
	sedimentation	1	150	150	
	cesspit	1	50	50	
installations					
	mechanical room	×			
	vertical shafts	Х			
	total	gro	oss floor ar	ea (GFA)	<b>2.739</b> sqm

## **Design references**

# design















## **Design references**

# design





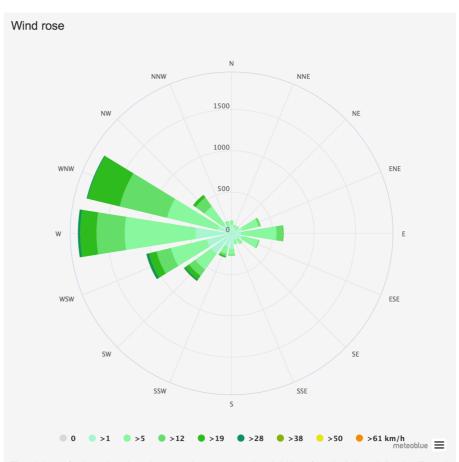




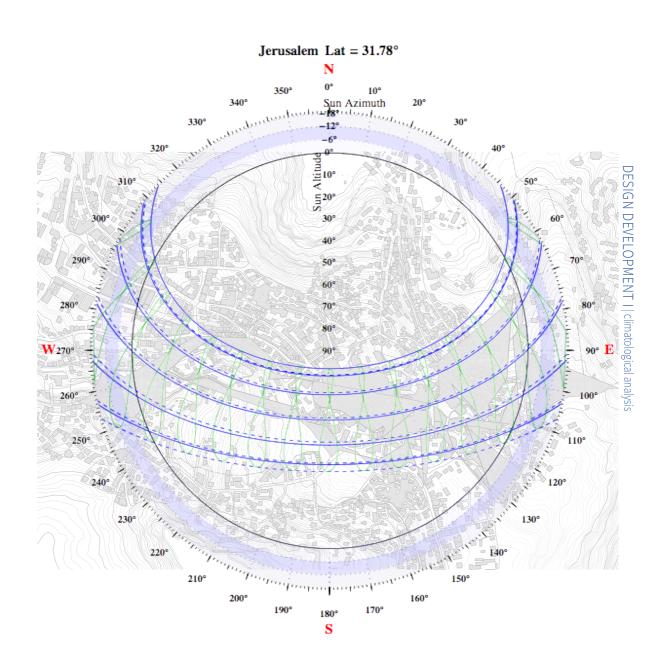


## **Hebron climatologies**

## design

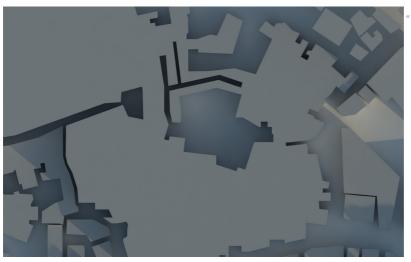


The wind rose for Jerusalem shows how many hours per year the wind blows from the indicated direction. Example SW: Wind is blowing from South-West (SW) to North-East (NE). Cape Horn, the southernmost land point of South America, has a characteristic strong west-wind, which makes crossings from East to West very difficult especially for sailing boats.

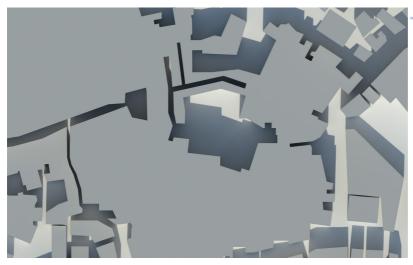


## Sun studies winter

## orientation



« winter situation december 21st 08.00h



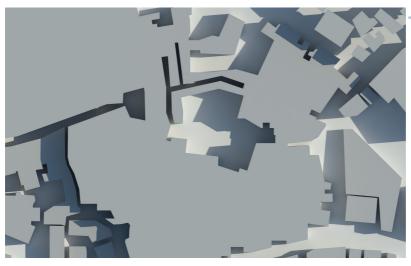
winter situation december 21st 13.00h



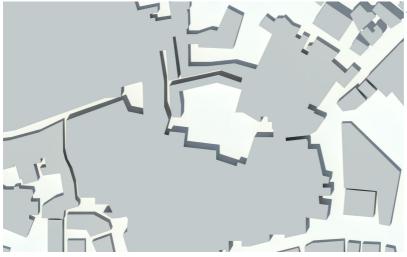
« winter situation december 21st 18.00h

#### Sun studies summer

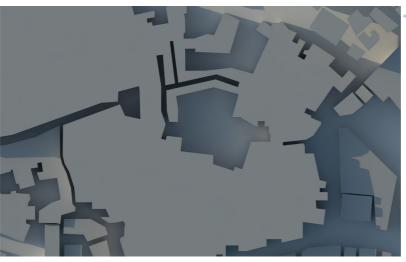
## orientation



« summer situation june 21st 08.00h



« summer situation june 21st 13.00h

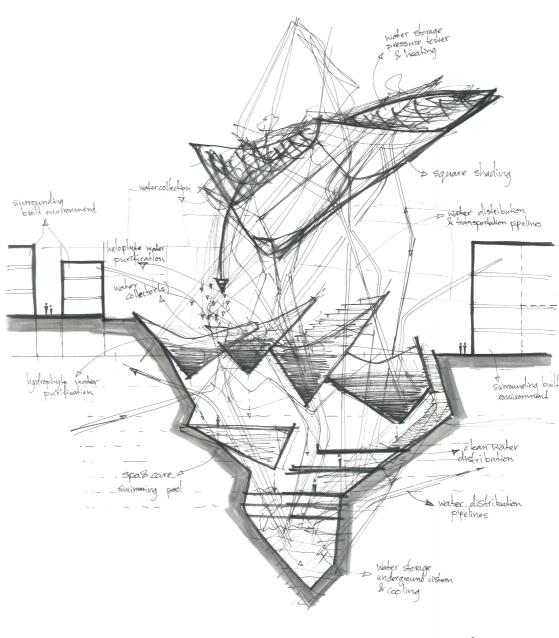


« summer situation june 21st 18.00h

#### **Temple of Water**

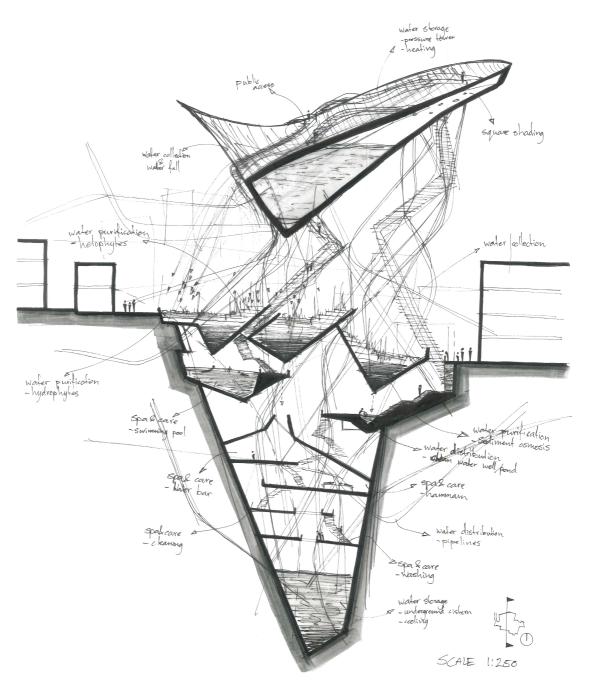
## design

TRANSVERSAL SECTION





SCALE 1:250

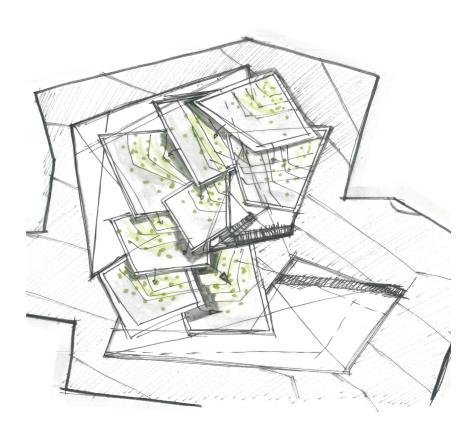


#### **Temple of Water**

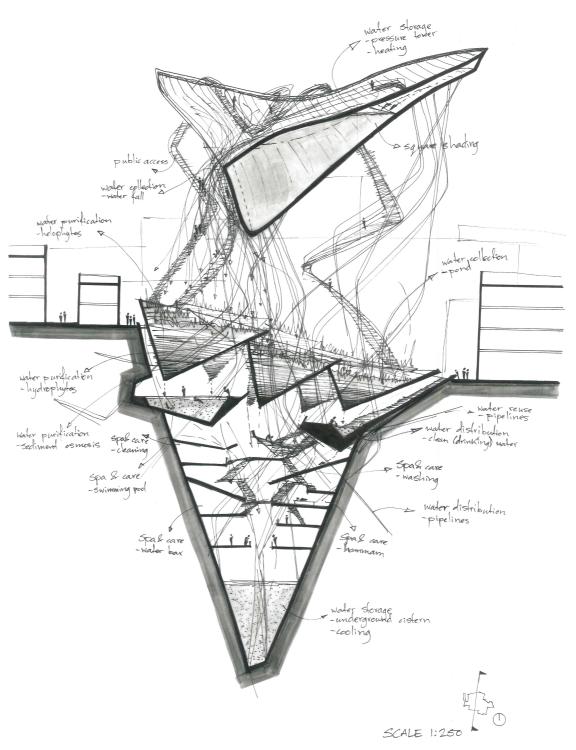
## design

One of the most important and representational drawings in the design process is the section drawing at the right page.

Although it is 'only' a hand drawn sketch on a scale of 1/250 (more or less) and although not all shapes my be 'perfect' yet, the drawing demonstrates important ideas and conceptual thinking of what the building should and/or could become.



#### TRANSVERSAL SECTION



#### Theme of contrasts

#### development

#### development of the shape

contrasting approach and encounter research into the schizophrenia through suprematic art

twin phenomena in suprematism

round - cornered geometric - organic open - closed symmetric - asymmetric regular color use - irregular color use singular color use - plural color use twin phenomena in context and design

israeli - palestinian old - new up - down high - low hot - cold hebron - al-khalil static - dynamic visible - invisible friendly - aggressive

In the development of the shape of the building, I relate to existing art works that could help in developing the right language for the architectural design.

In a space of conflict and opposition with people from different origins and beliefs, the society and its context has a high contrast.

As for the shapes of the architectural design, I believe this contrast has to be represented through the design, to relate and connect to society and be a product of society's space.

The people have to feel connected and welcome to the design, also the spaces should be attractive for the people to enter and be in.

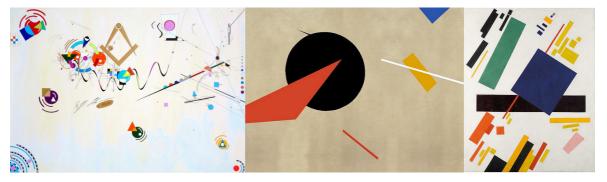
I relate to Suprematism, which is related to the design specifications for the Agora of Reconciliation.

Suprematists believe that feelings call for technology to come to life, in contrary of constructivists who believe that life is controlled by technology. In Suprematism, man is envisioned as both originator and transmitter of the world's true reality. Suprematism rejects both ideas as objects, and could be seen as a very neutral art movement - eligible, approachable and accessible to all people.

Besides, Suprematism demonstrates large contrast, hence relating to the Israeli-Palestinian conflict - in the search for a balance of contrast in different aspects.





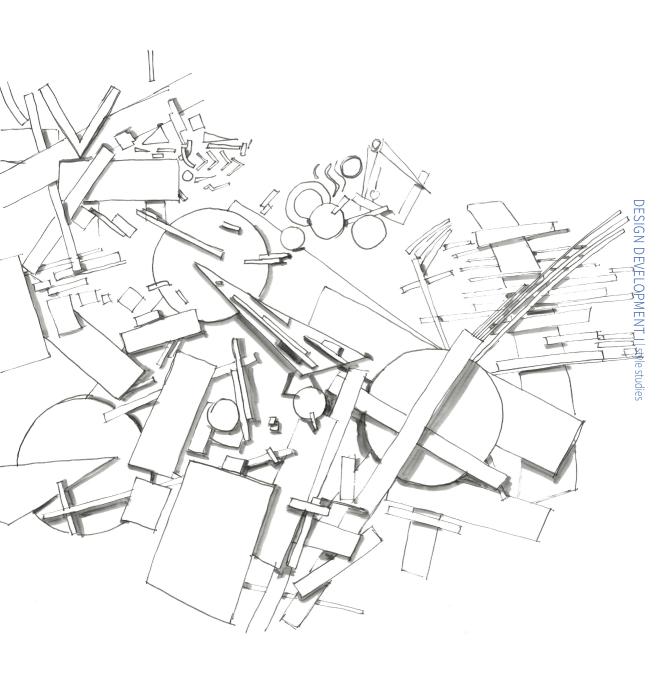




#### **Suprematic analysis**

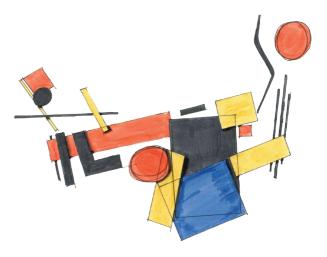
## development

The search and development for the shapes of the Hebron walls through Suprematist art works takes places within a process of analyzing and understanding the art movement. How do the shapes relate to each other, and why do they relate (or why don't they relate).



#### **Hebron walls in Suprematism**

## design



Suprematist translation of design 1 \*

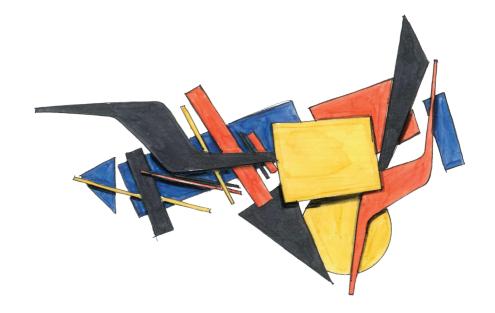
The elaboration of the Suprematism in the Hebron walls happens through the personal translation of the Suprematism applied to the floor plan design.

Within this elaboration, an own expression is given to the Suprematic language and also the demarcation of conceptual ideas of the design. In the latter Suprematist translation of the design of the Hebron

walls, the square of reconciliation is placed in the upper layer, upon the house of contemplation and market, shops and crafts functions. The contrast between color use, shapes and staticism and dynacism happens through the shapes, orientation of shapes and relation to other shapes.

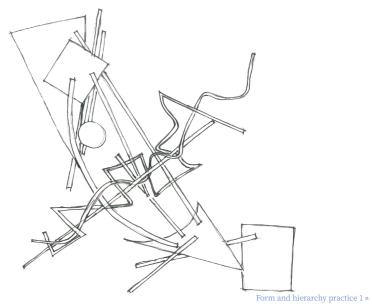


Suprematist translation of design 2 ≈

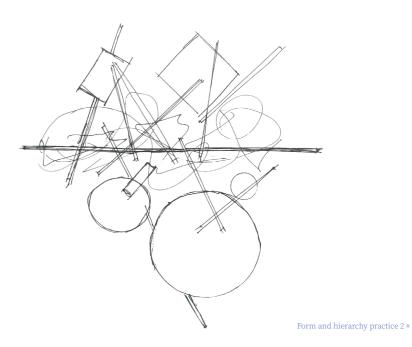


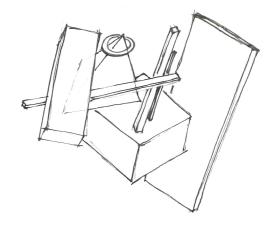
## Form and hierarchy research

## design

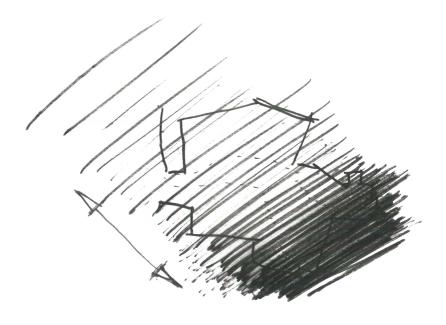


Text to be continued





Form and hierarchy practice 3 \*

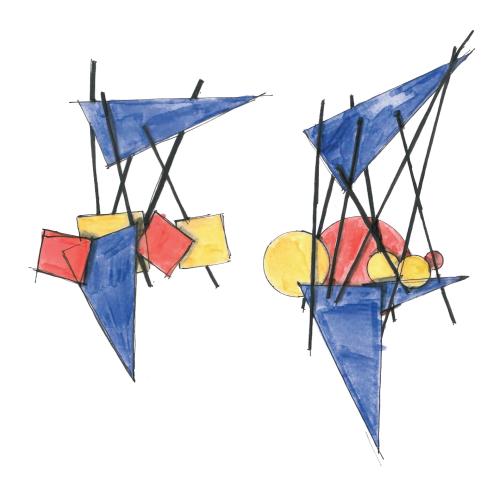


#### **Temple of Water in Suprematism**

## design

What if the design so far would be translated to my interpretation of Suprematism?

Through taking a step back and trying to translate the building design into a Suprematic drawing, I aim to rethink design decisions and try to find the main ideas in shape and coherence.



#### **Materialisation inspiration**

## design

For the Temple of Water in Hebron, I am inspired by a couple of themes and materials. Water counts as the most important and with a lot of potential for the creation of different atmospheres.

Glass craftmanship is important as Hebron is famous for its glass industry. Also the source material - sand - is inspiritional as the surroundings are quite desert-y.















#### Materialisation and design references

#### design

Most of the design is underground and has different characteristics. On the one hand there is the connection to the soil and the water, on the other hand there is the mysteriosity of what is really there, and how is everything supported?

Both ancient as modern underground and rocky architecture are inspirational for the further design development in shape, material, texture, light and composition.





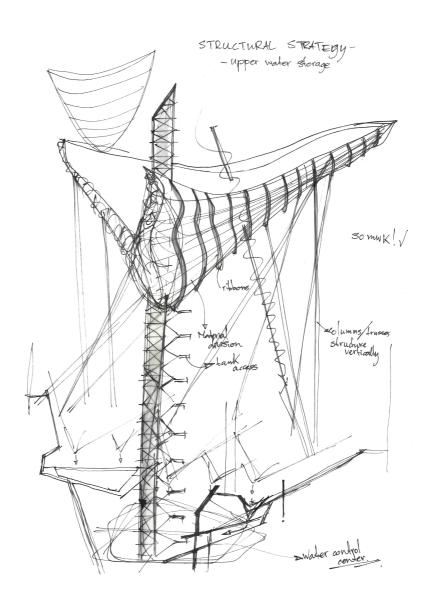


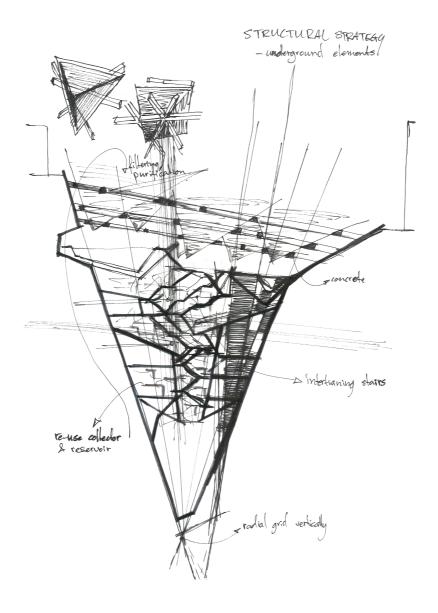






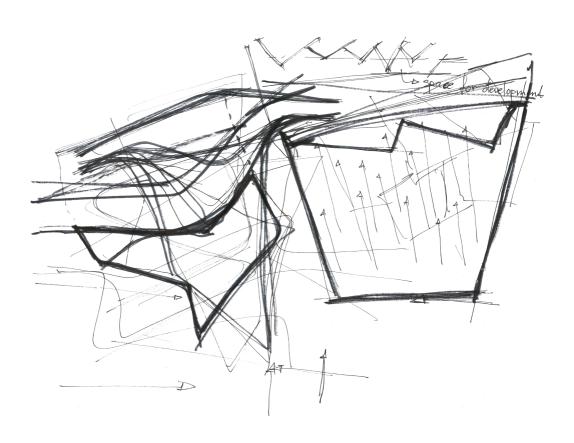
#### **Structure & construction design process**

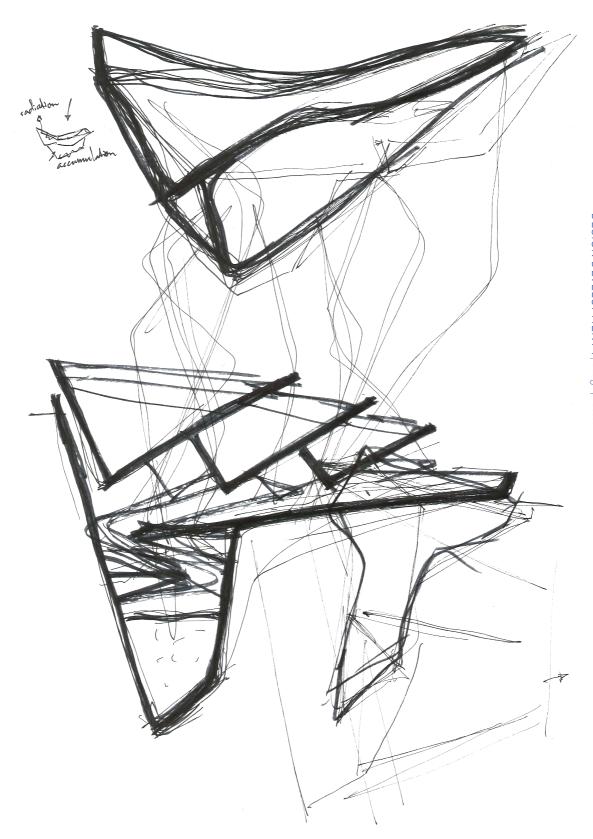


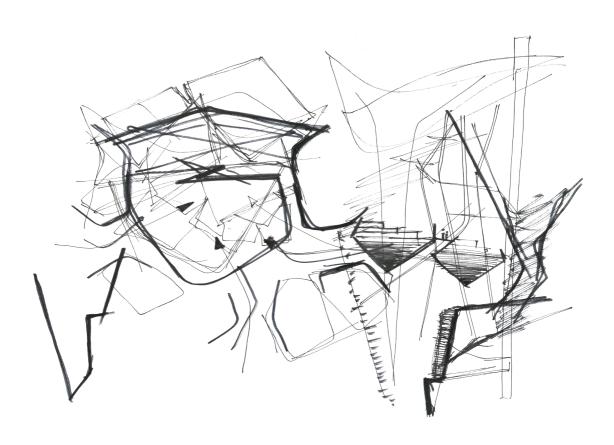


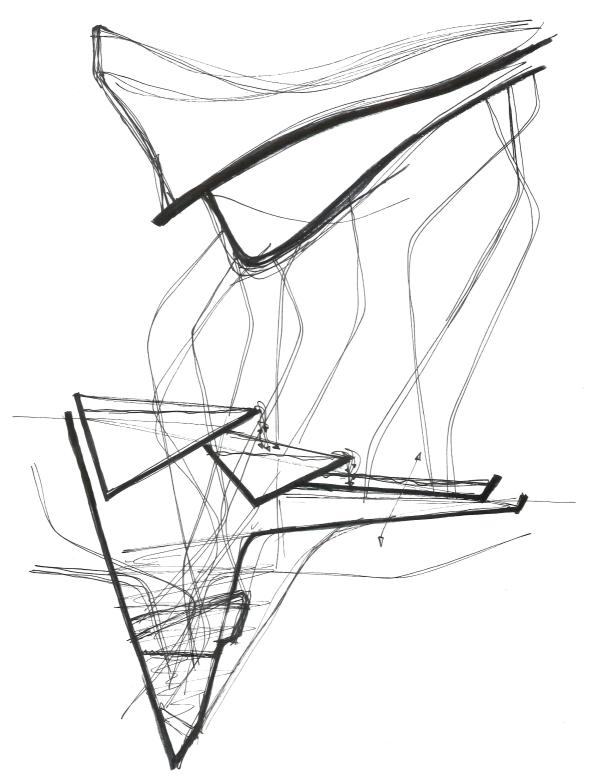
#### **Structure & construction design process**



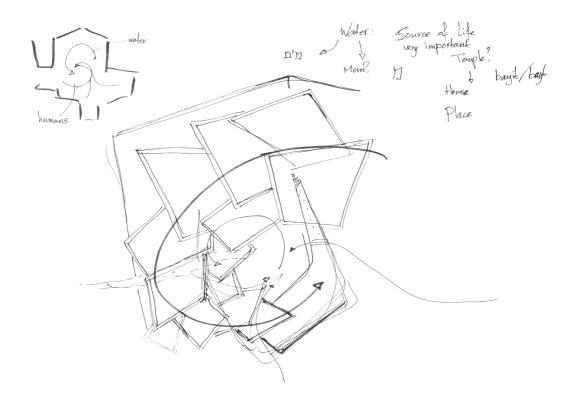


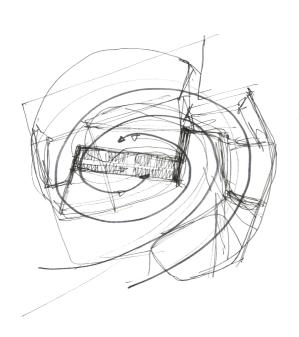


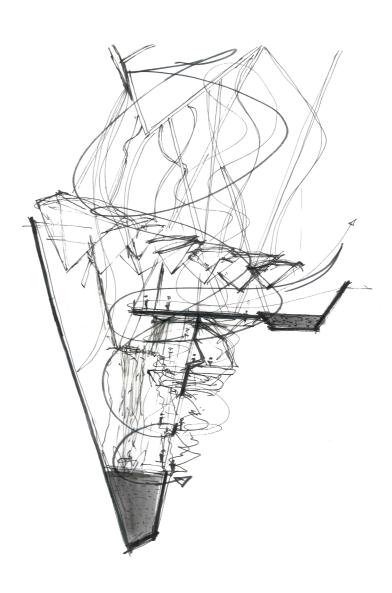


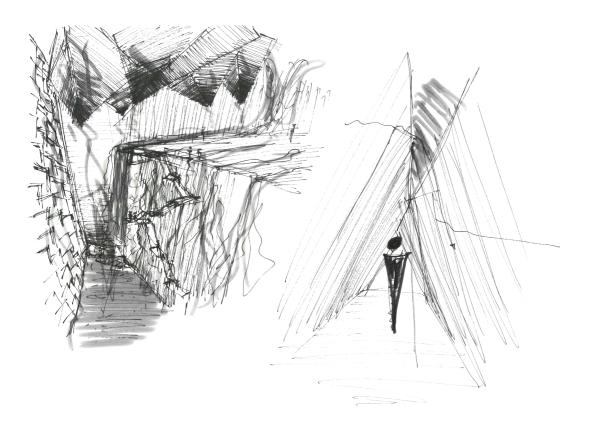


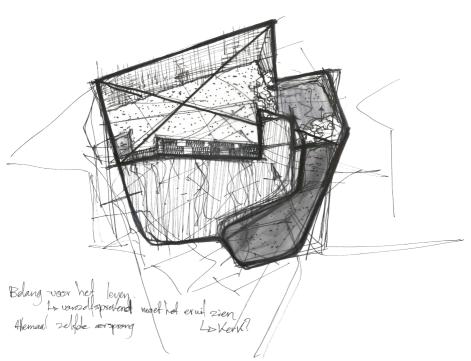




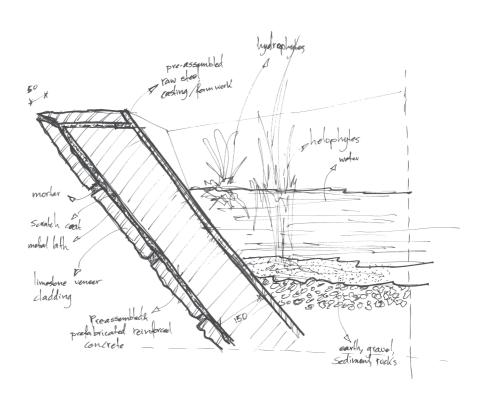


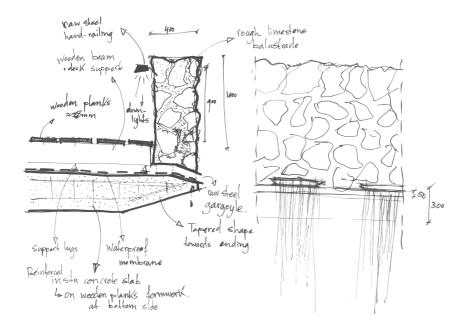


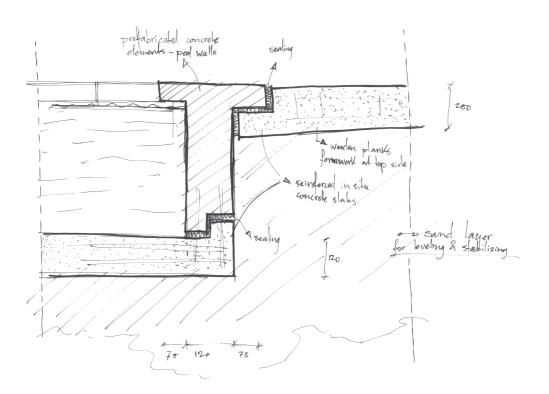




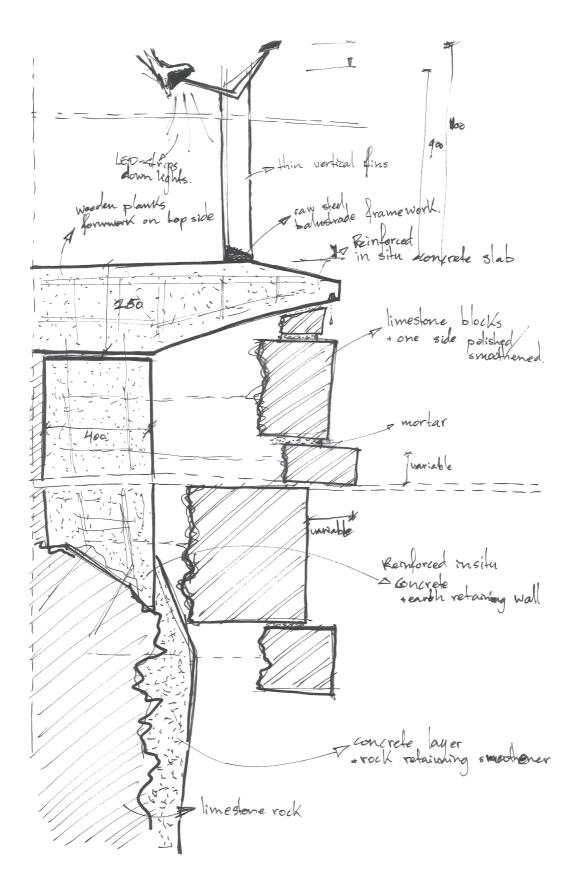
#### **Detailed design process**



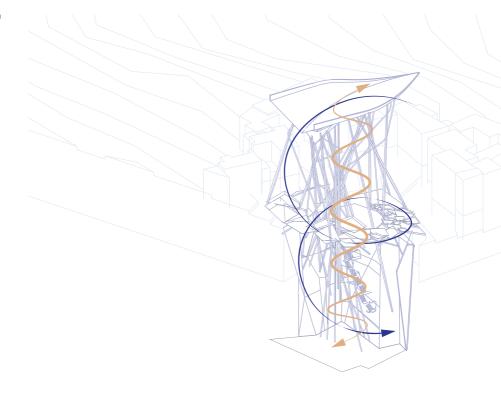


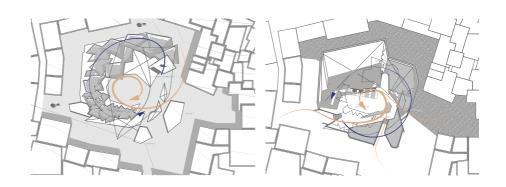


#### **Detailed design process**



### **Temple of Water**







#### **Design concept**

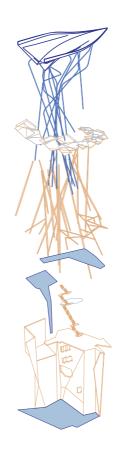
### design

The design of the Temple of Water in Hebron is a building that is important for the entire city.

Through the building that contains different aspects in providing the people of water and spaces that contribute to being in the building, the building connects to the people in an abstract sense and in a real direct sense of water provision.







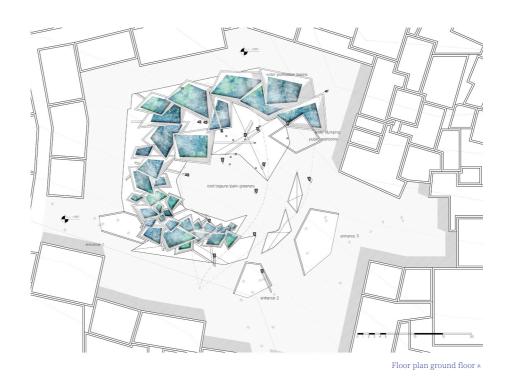


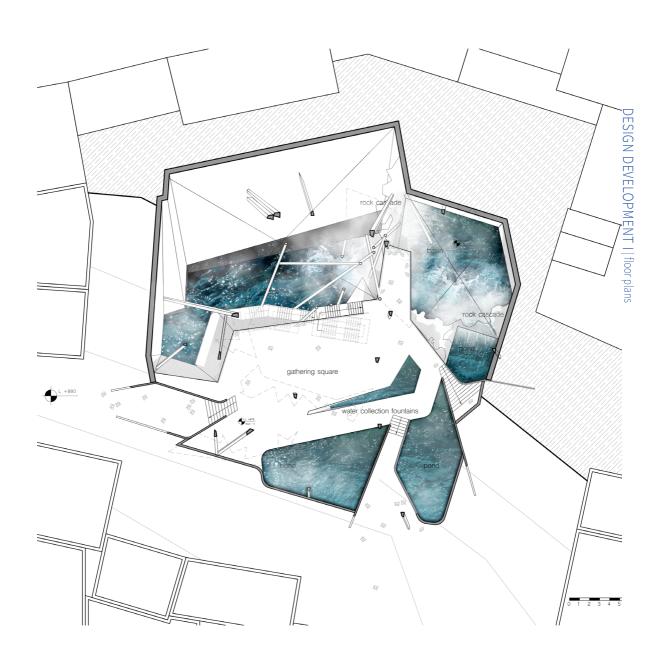




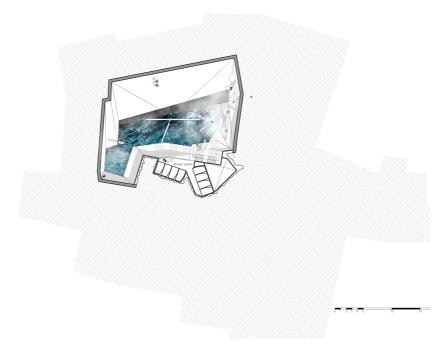


### Floor plans

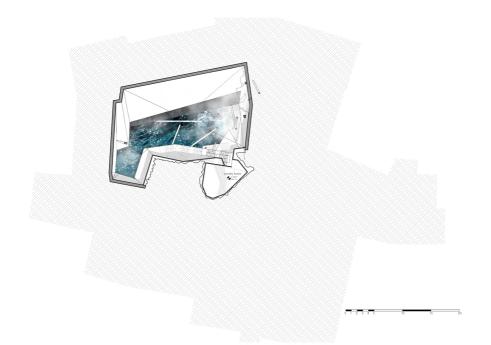




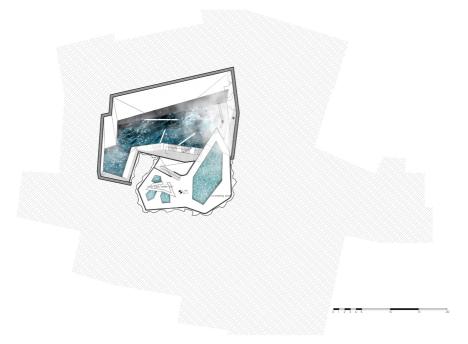
### Floor plans



Floor plan level -2 ≈



Floor plan level -3 ≈



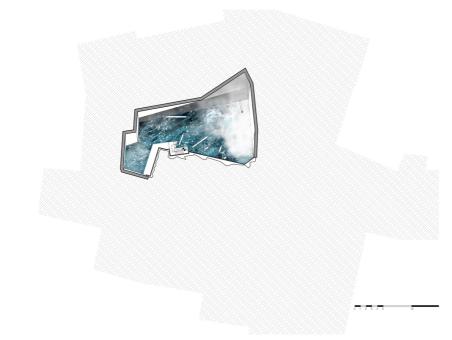
Floor plan level -4 ≈

### Floor plans

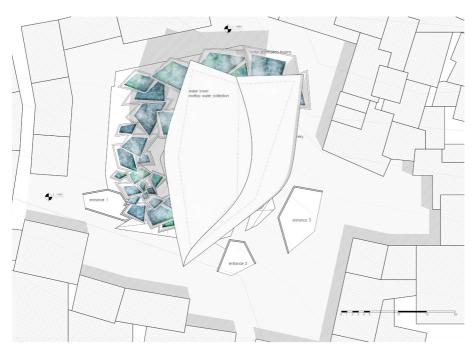
# design



Floor plan level -5  $\approx$ 

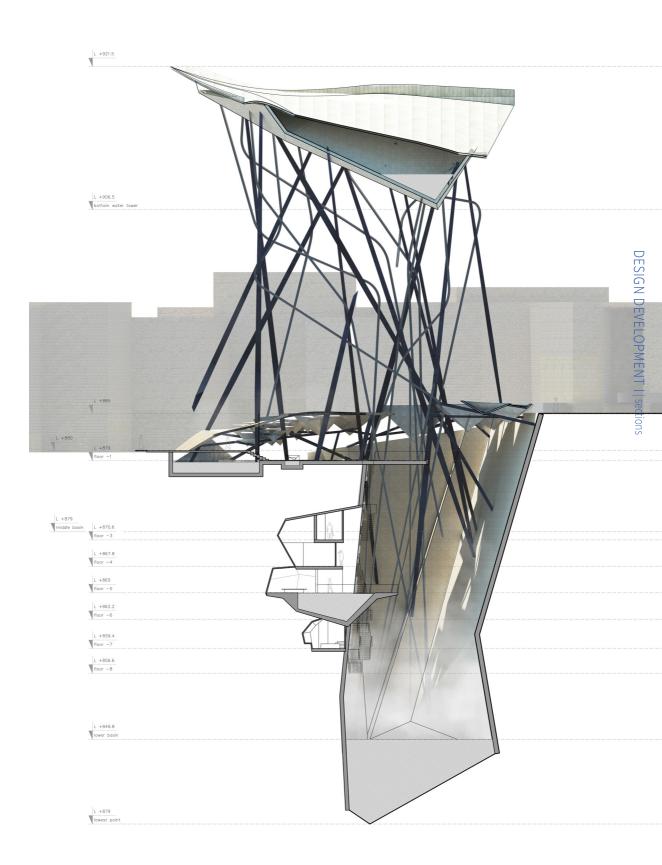


Floor plan level -6 ≈

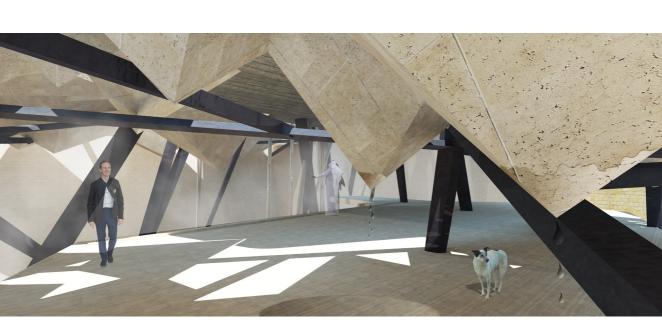


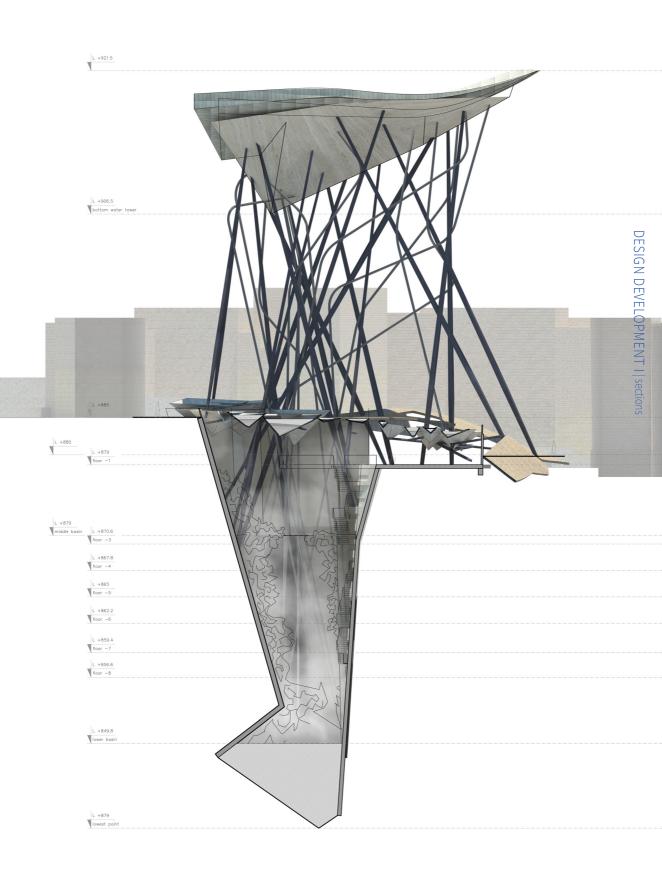
Floor plan top view  $\hat{\,}$ 

#### **Sections**



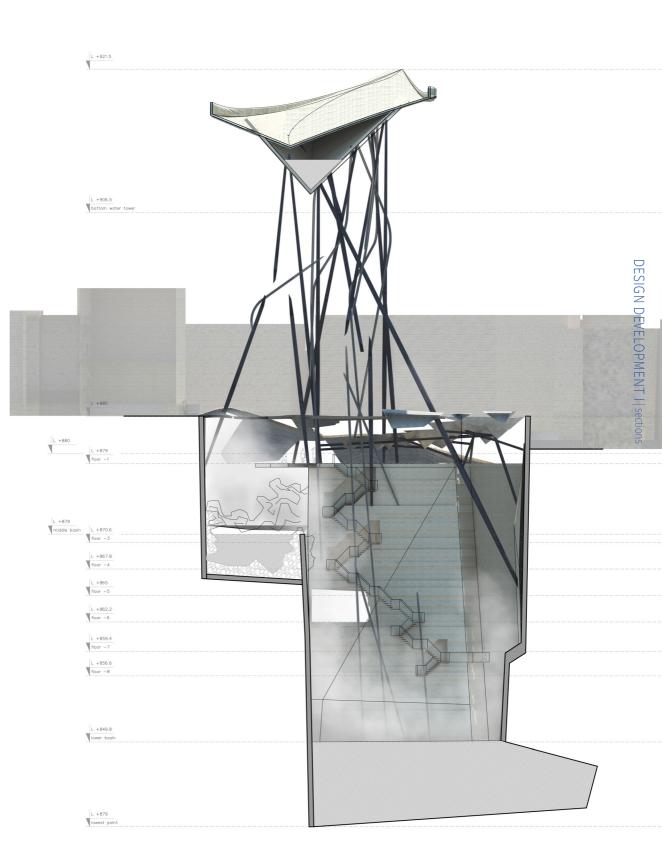
#### **Sections**



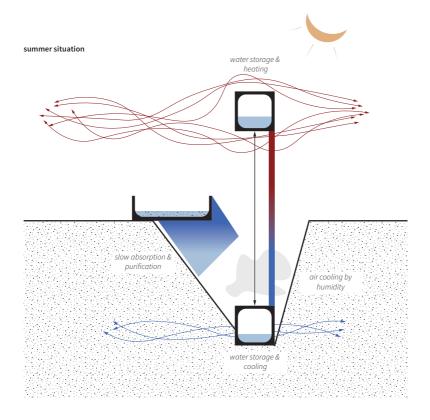


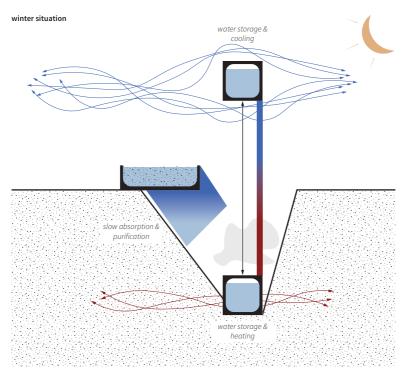
#### **Sections**





## Climate design

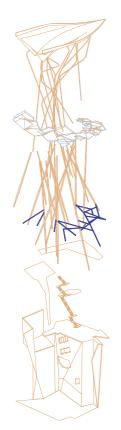


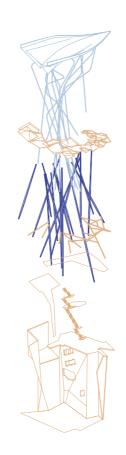


## Structural design



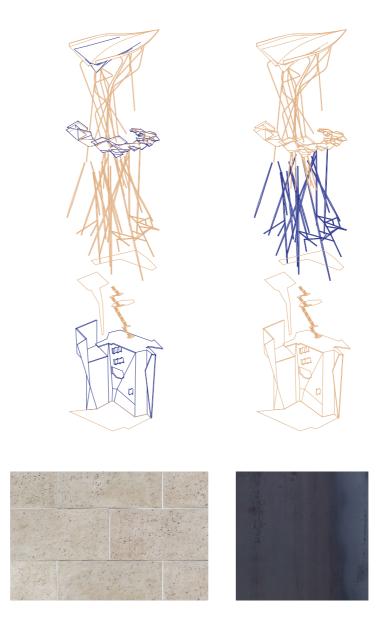








## Material design



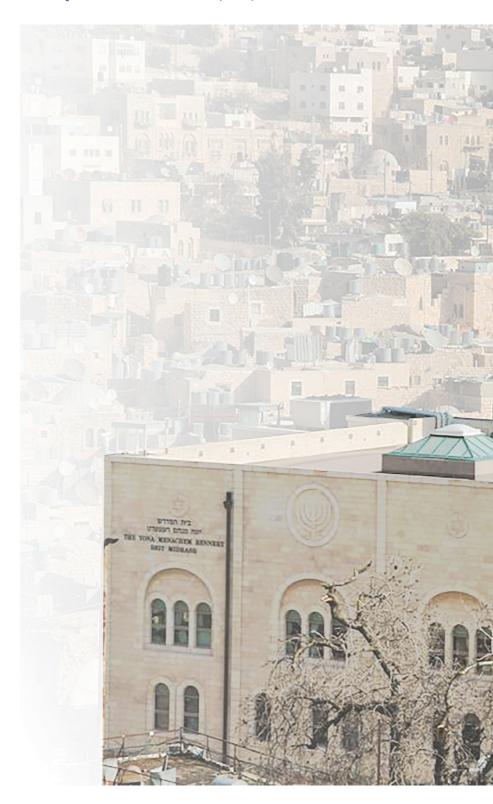


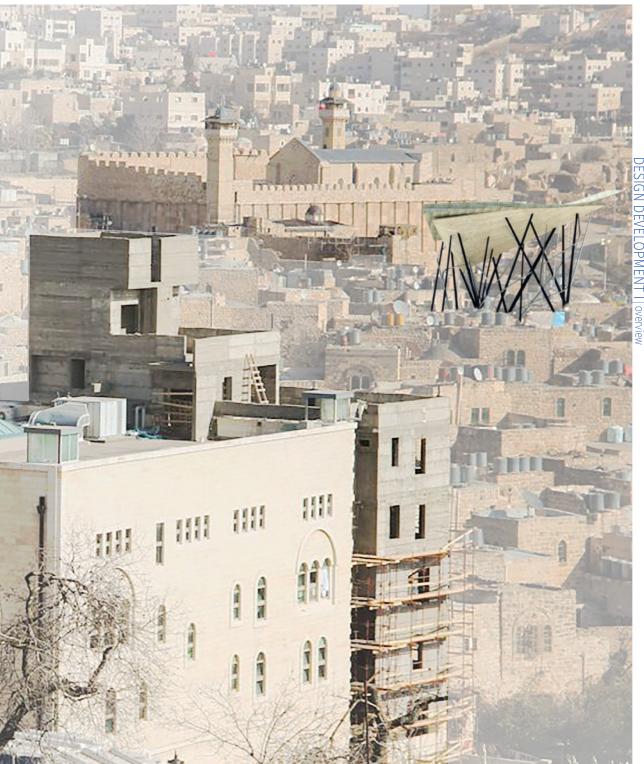






## Temple of water in (un)divided Hebron





# design development II elaboration

#### **Continued development**

## development

The second part of the design development starts with the reconsideration of and a reflection to the ideas and choices from the first design development phase.

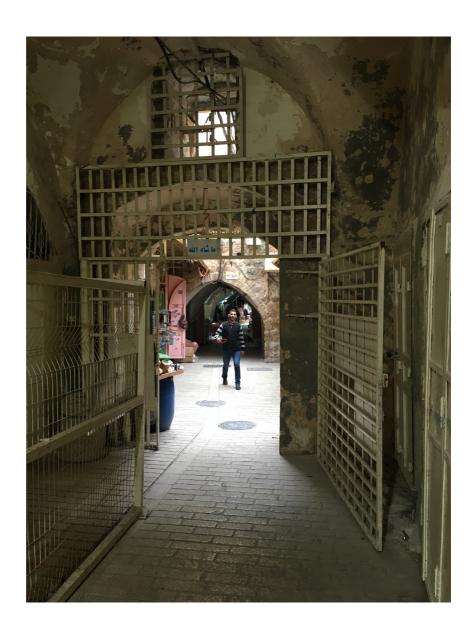
Then, through a location analysis during and after the site visit certain ideas are defined and taken with in the design.

Important in this phase of the design is the clarity of the design and its elementa and the dimensions and appearance of the building at a close distance and from afar as part of the urban context.

#### **Location analysis**

## site visit

Hebron is a interesting place that is like no other place in Israel and the Palestinian Territories. The differences between the Israeli controlled area and the Palestinian controlled area are immense and immediately visible when crossing movement barriers.





#### **Location analysis**

#### site visit

The Old City of Hebron is controlled by the Israeli military (IDF) and checkpoints are used to keep this control on the area. The architectural embodiment of the drawn lines of the map represent themselves through gates, outposts, watch towers, soldiers and other physical barriers such as concrete blocks, gates, walls and earthmounds.



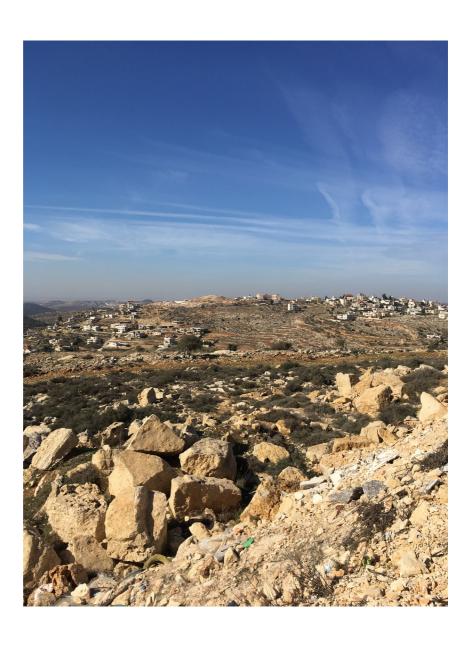


#### **Location analysis**

#### site visit

The Palestinian Hills or Judaean and Samarian Hills have rounded-off shapes and consist of sand, terra rossa and limestone - which is visible throughout the landscape.

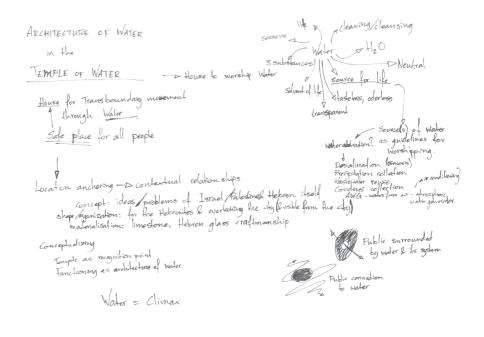
Moreover, the hills are so important for the people as a resource that almost all building are built from the limestone of the hills.

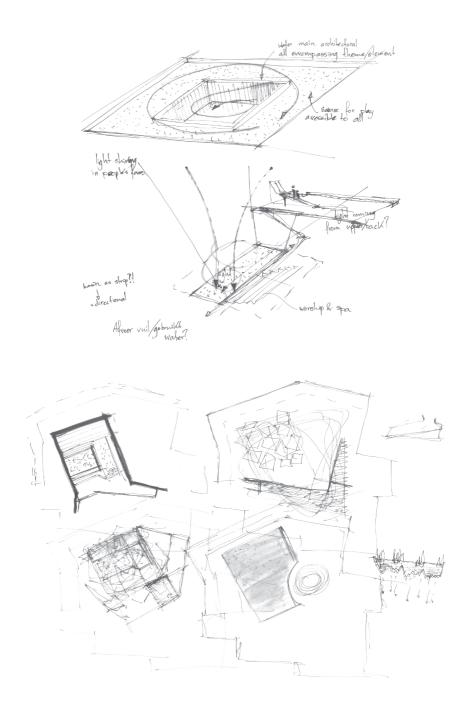


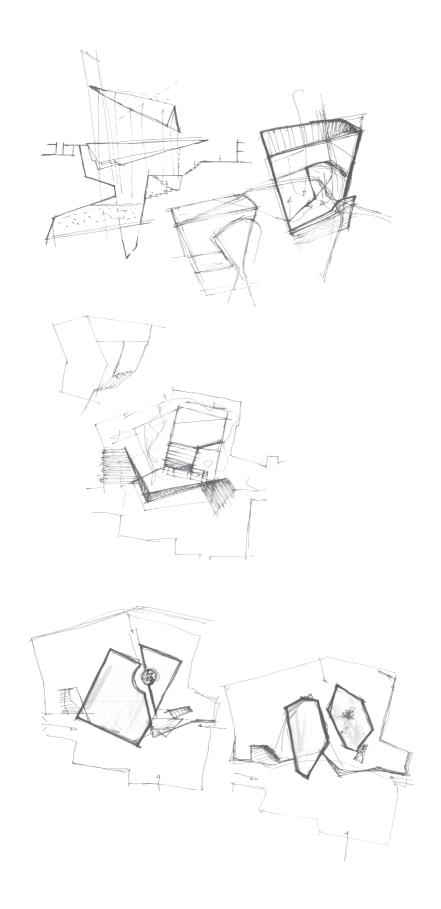


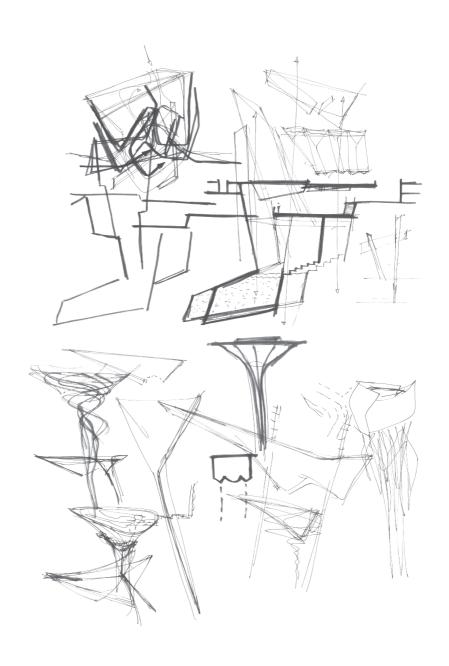


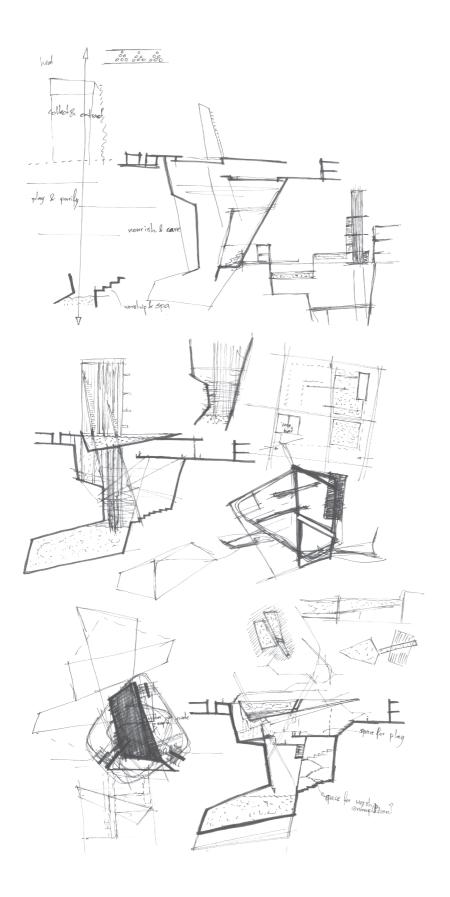
#### **Reconsideration & continuation**

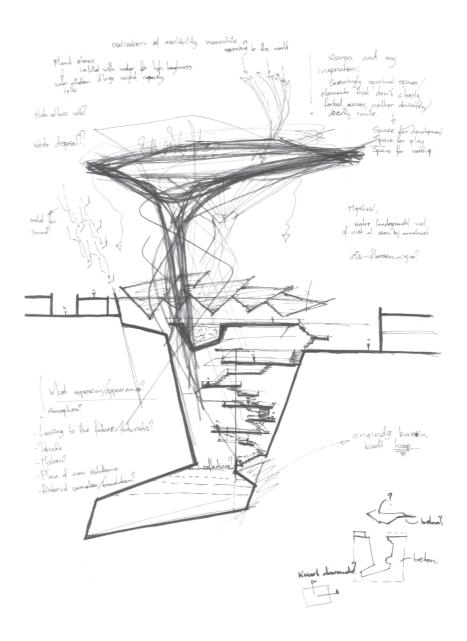




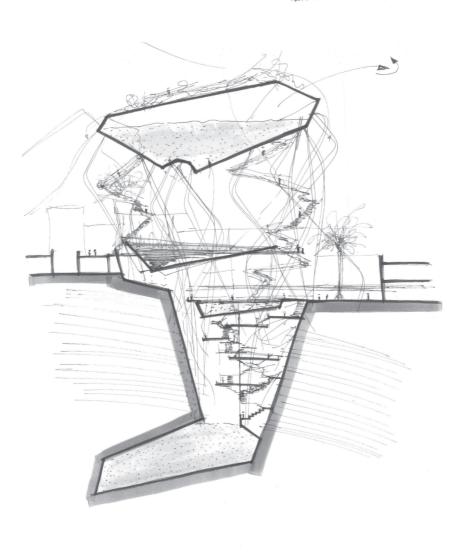




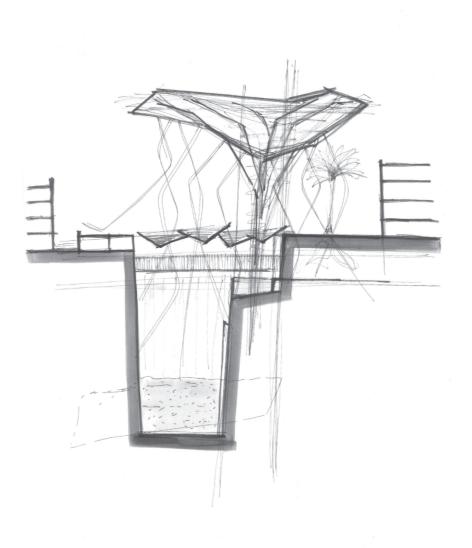


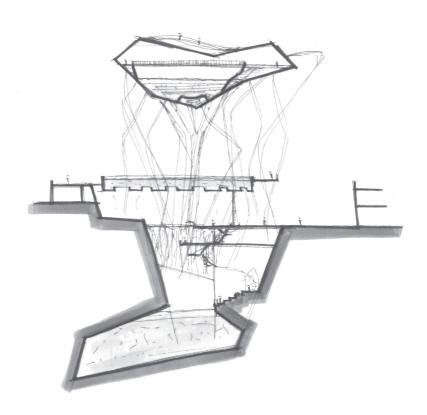


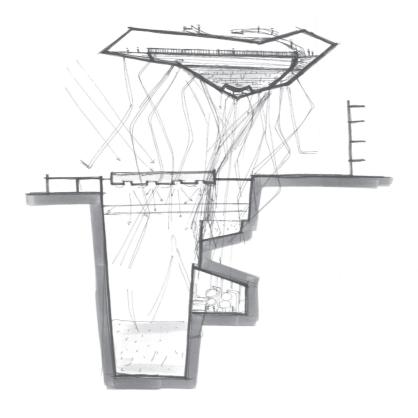
TRANSVERSAL SECTION



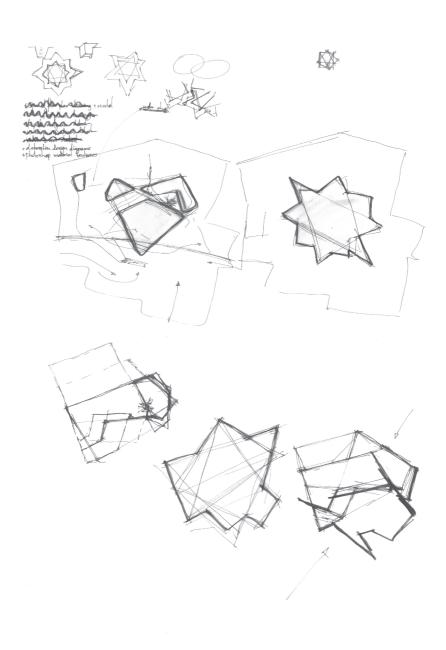
#### LONGITUDINAL SECTION

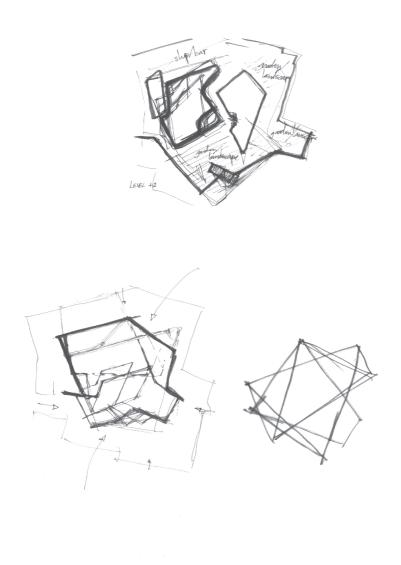




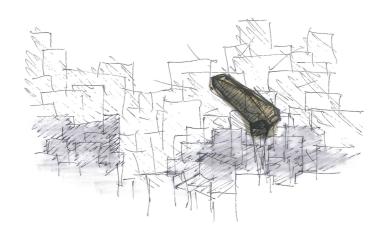


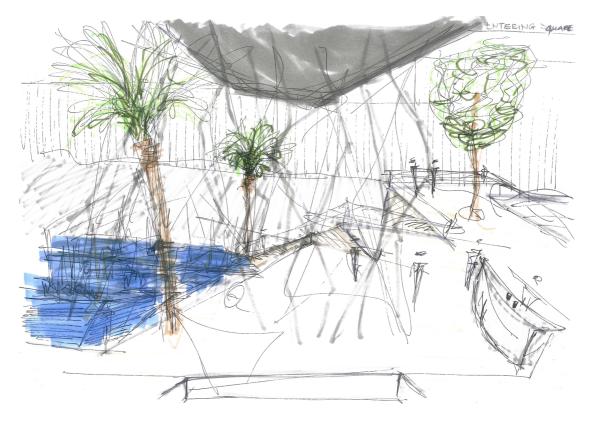
## development

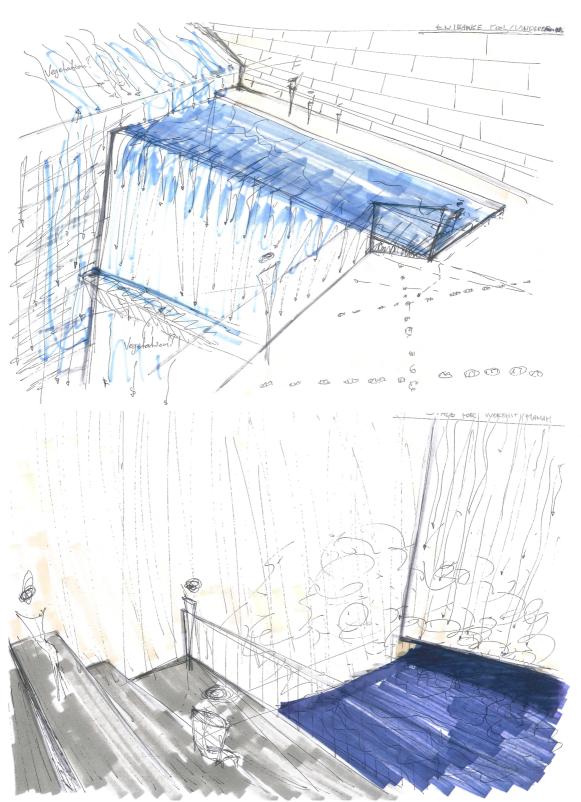




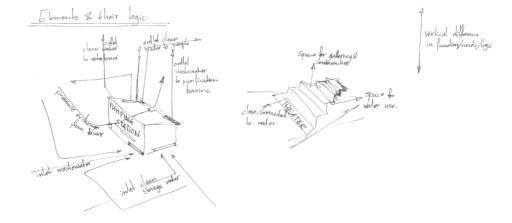
## development

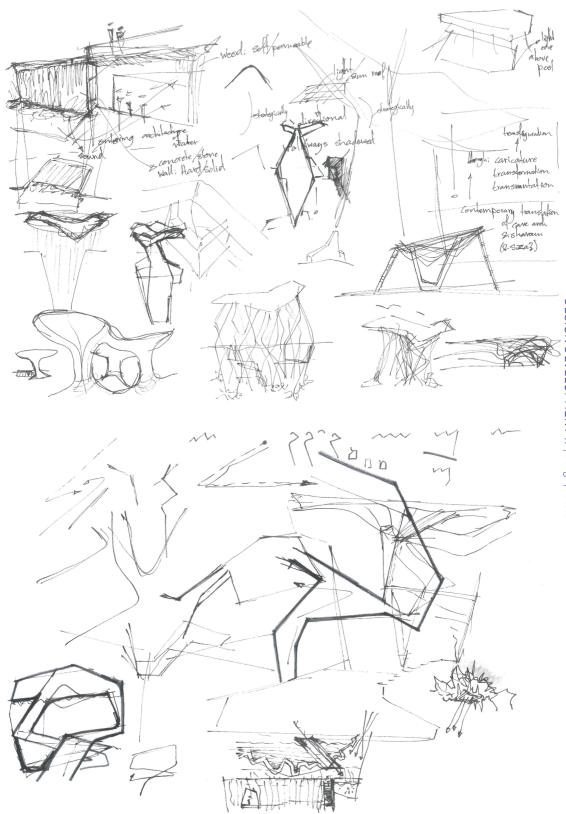






## development

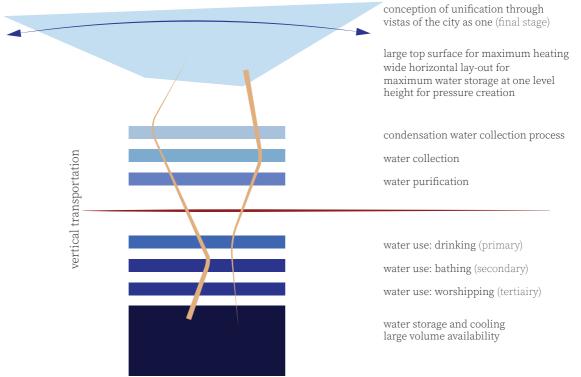




## Organization in section

# conditions

The translation of the technical concept of the functioning of the Temple of Water is translated into a conceptual scheme of the functioning, hierarchy and necessity of water in the vertical section.



### Floor plan concepts

## conditions

Next to the vertical section concept of the building, the horizontal plane is important for the organization of the program of the building and for the people to use and understand the building.

For the floor plan I went looking for a connection to the (collective) identity of the Israelis and Palestinians.

In the time before Abraham and the split in religions into Judaism, Christianism and Islam, a language existed (Phoenician) that was spoken by everybody. Also, in Hebrew and Arabic there are still traces to be found of this communal language.

In the Phoenician language the character for the word Water was the character as shown at the right, pronounced as 'ma'. In Hebrew water is called mayim right now, and in Arabic maa.

Through a transmutation of the character 'ma', I created the floor plan for the Temple of Water, a floor plan that is recognizable and identifiable for both Israelis as Palestinians.

'ma' character



transfiguration - 3 dimensionalisation



transformation
- materialisation &
texturialisation



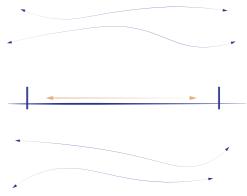
## **Building shape concept**

## conditions

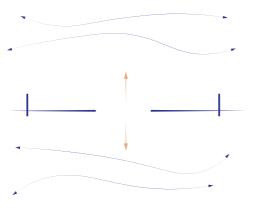
The building shape is important in its verticality because of the technicalities of the water system, but also as a counteract to what is possible at the ground surface.

Movement at the ground surface is limited by movement barriers (for humans), while water flows underground and air flows (and clouds, birds, pollution, etc.) above ground continue uninterruptibly.

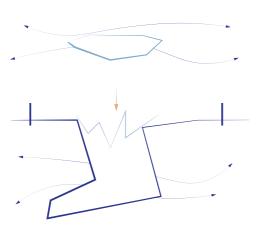
In the Temple of Water, the technical specifications are used to bring the people to this lower and upper levels, to be detached from the limited ground surface.



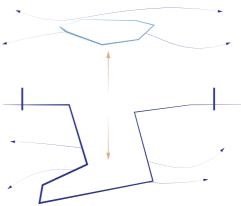
starting situation/horizontal barriers



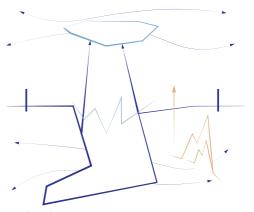
towards space without barriers



well topping/water purification basin

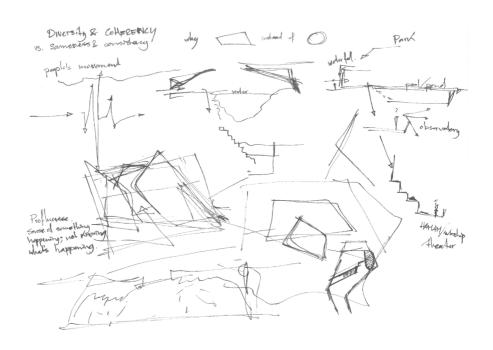


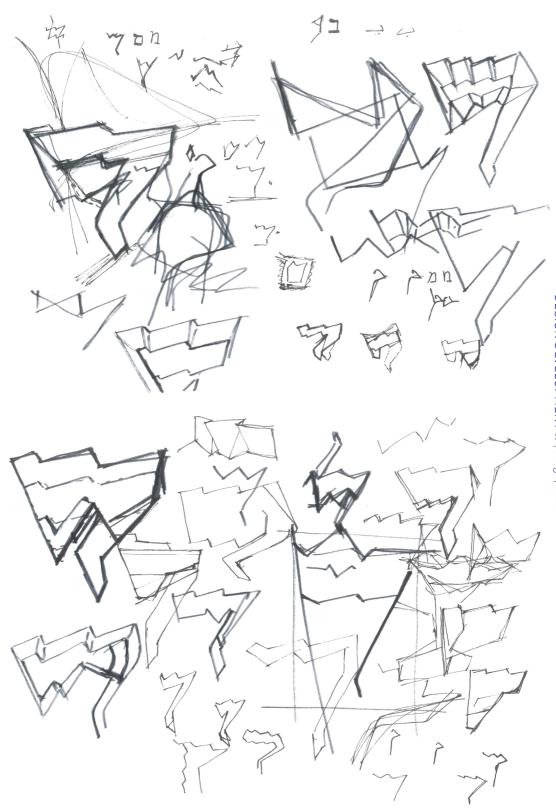
water storage well/water storage tower



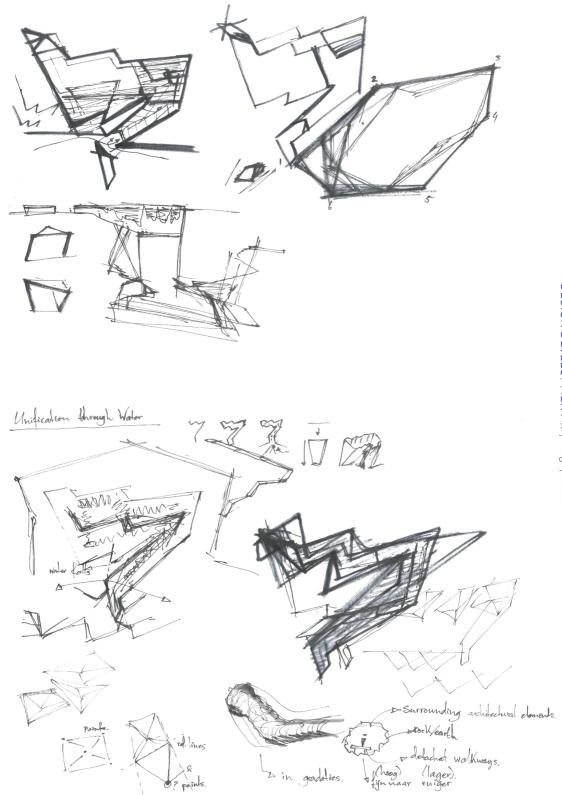
completion/connection

# progress





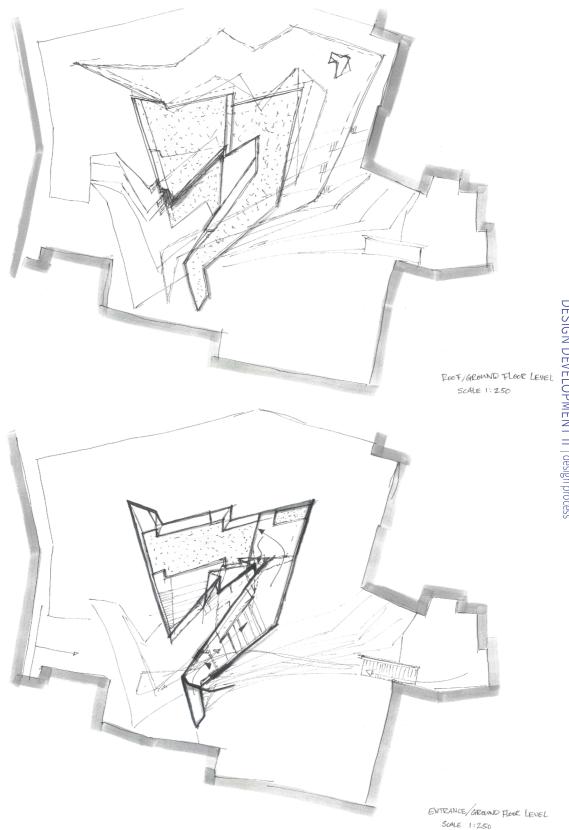
# progress



# progress

After a set of sketches on scale 1/500, and the generation of more ideas and a clearer concept, two floor plan drawings are important in the consolidation of the last version of floor plans.

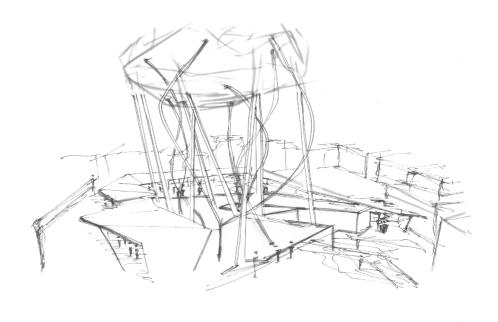
The shown sketches of floor plans on the right page contain most important concepts of the building.

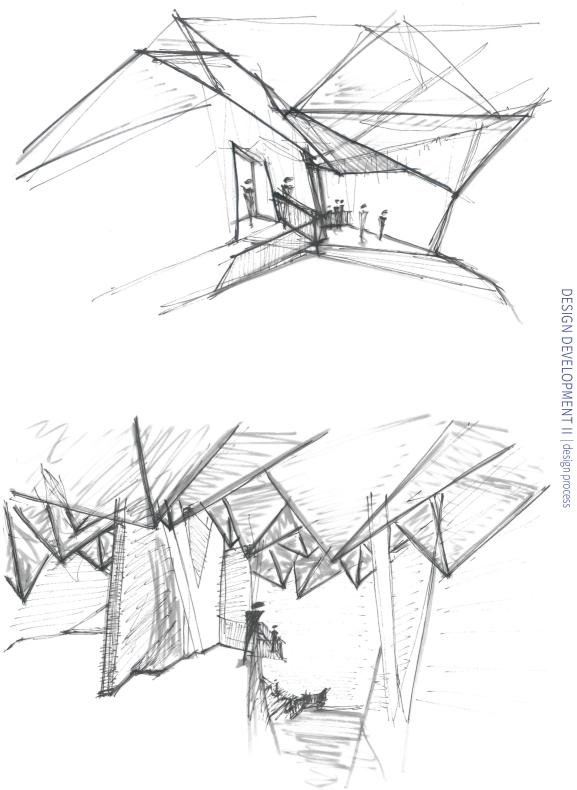


## progress

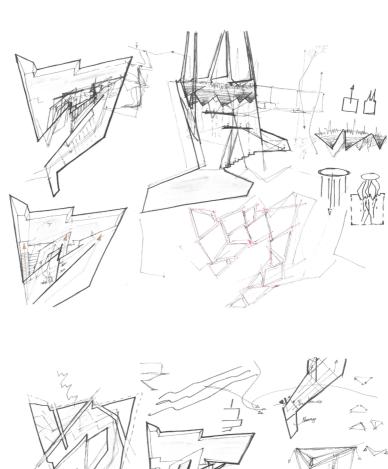
As a step following the drawing of floor plans simultaneously with the sections, is the three-dimensionalization of the different spaces and areas in and around the project.

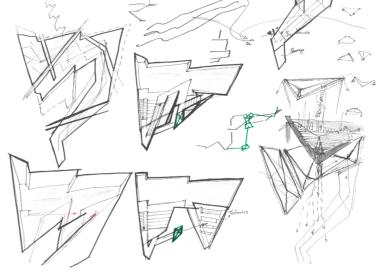
Important questions before, while, and after sketching are: What would it more or less look like following the floor plans and sections? How do I want it to look like? What does it exactly look like? What are the dimensions and proportions? Does it translate the concept as desired? What could be better, what should stay?

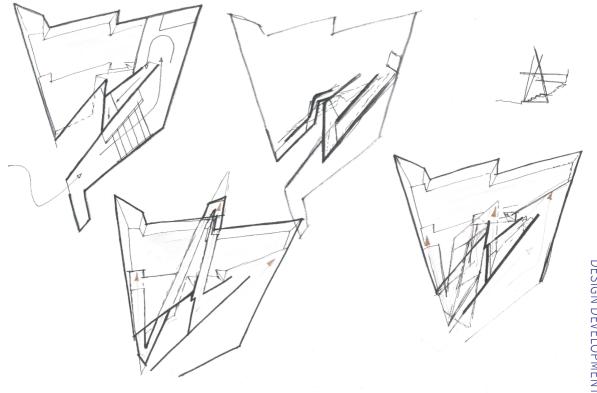




# progress







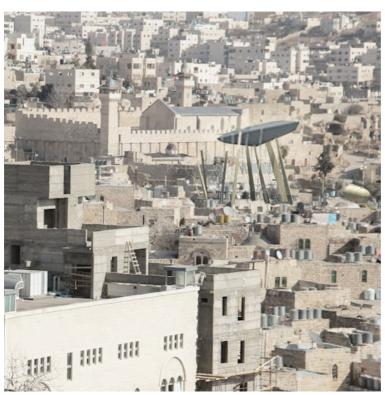
## progress

In the process of defining the shape both underground and above ground, several tests have been made.

Especially for the upper water storage, visual tests in renders and physical models have been important do determine the size and height together with the technical conditions for the functioning of the tower, as well as with the impact and sign that the building should give as a landmark and important building, institute or temple in the city.



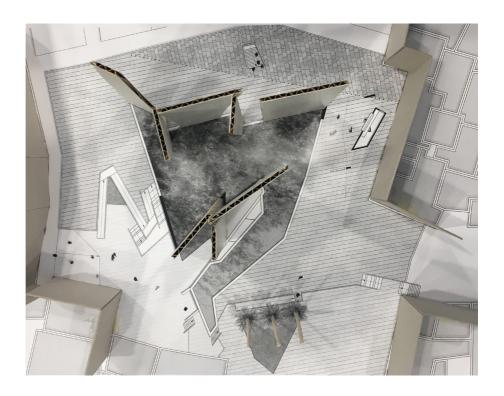


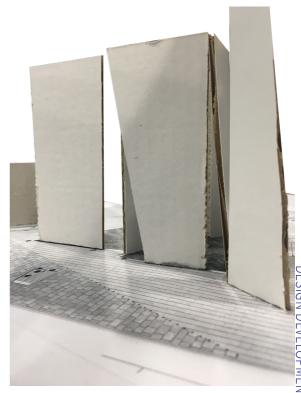


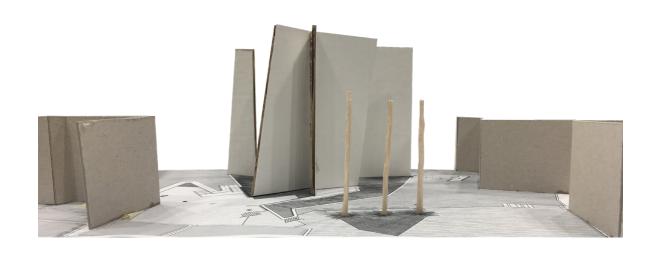
# progress

On a smaller scale, the scale of people next to the people, the definition of the upper structure on the ground surface is essential for the experience of the building at first sight.

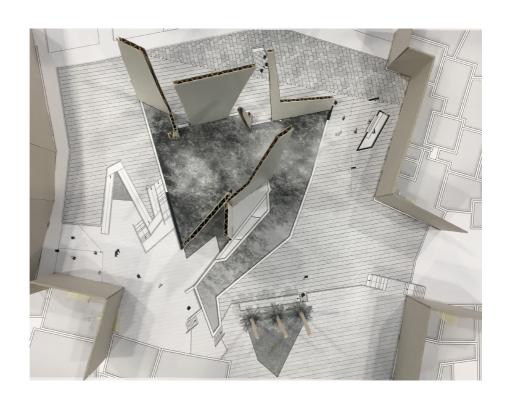
The images demonstrate what different design solutions of the 'colums' or vertical structure do to the space and the experiencing of the building.



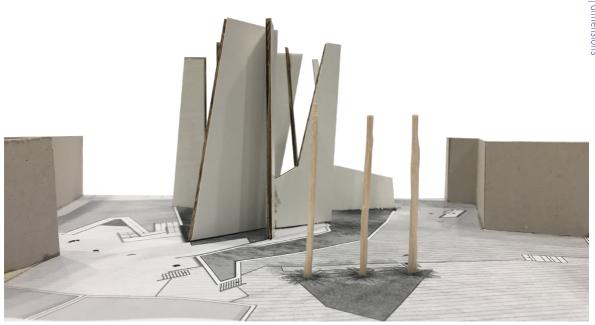




# progress







# progress

During the process I found it important to create a contradiction in open and closed, the framing of different elements at the square and creating moment of framing, and the direction-giving of the structure to the people to walk (around the 'ma' character embodied by the water pond) on the square.











# reflection

master of science in architecture, urbanism & building sciences klaas johannes de jong





#### PERSONAL INFORMATION

name student number telephone number private e-mail address Klaas Johannes de Jong 4144554 06-11431479 KJ\_deJong@outlook.com

#### **STUDIO**

name / theme

Explore Lab / Architecture of the complex social context - the Israeli-Palestinian case

teachers / tutors

Henri van Bennekom (design) Carola Hein (research)

delegate of board of examiners

Hubert van der Meel (building technology)

Daan Vitner

argumentation of choice of the studio

After a short stay in Israel and the Palestinian Territories, I became interested in the water scarcity in the area and the translation of the Israeli-Palestinian conflict to daily lives and its architectural embodiment. The idea of making architecture into a piece of politics is something that I am interested in, which I would like to practice in my future as architect

#### **GRADUATION PROJECT**

title Embrace diversity: (un)divided Hebron

coexistence through the architecture of

water

location Hebron, West Bank, Palestinian Territories

# colophon

# reflection



read online



### Introduction

### reflection

The graduation project 'Embrace diversity: (un)divided Hebron: coexistence through the architecture of water' is a project developed from the fascination of the political influence in architecture and the political influence on people through architecture. The project specifically focuses on the division in Hebron, in which I think that the diversity should be embraced and celebrated instead of causing hatred, mistrust and misunderstanding.

Through my fascination, I researched the approach of people and architects towards territories and national boundaries and the influence of territorial management and nationalism on society in relation to - and simultaneously with - the representation of water management as a tool in 'Apartheid' societies or *spaces of conflict and opposition*. The theories apply to the Israeli-Palestinian context and its water management.

The full research complies a number of different aspects and themes of the Israeli-Palestinian context - including e.g. location-specific analyses of Hebron, a theoretical research into the power, meaning and influence of architects in spaces of conflict and opposition through the architecture of water, context-wide analysis of the general Israeli-Palestinian context.

The results of the full research serve as the foundation and source of inspiration for he design to be built upon.

In the Israeli-Palestinian 'Hydro-Apartheid'-society, the inclusion and exclusion of both the Israelis and the Palestinians reflects through the water mangement, which is a key source for mistrust, misundertsanding and antagonism of Israelis towards Palestinians and of Palestinians towards Israelis.

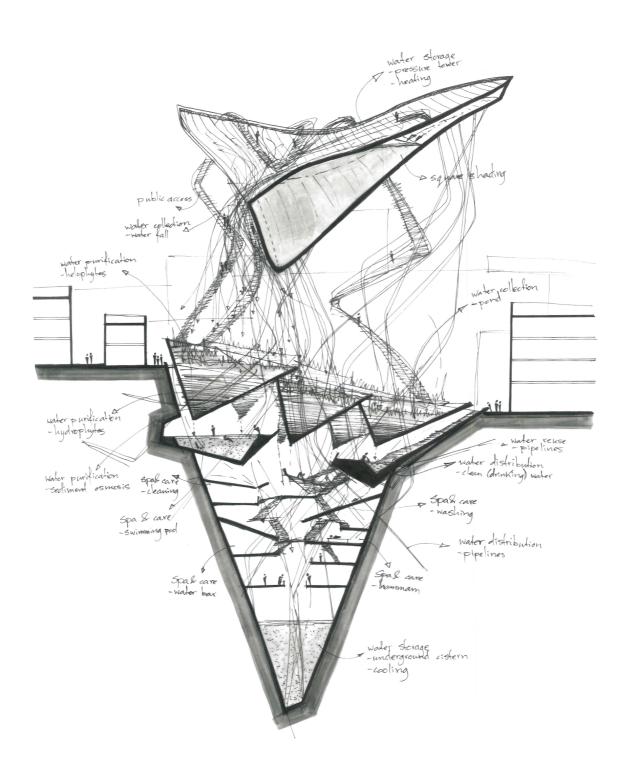
As a result of the research process, a design is formulated within the fabric of the Old City of Hebron - at an empty (deserted) square in the desnely populated historical casbah with souks, and in the proximity of the religious burial site of Abraham, a couple of checkpoints, road barriers, cameras and watch towers.

The design project is the *flagship* Temple of Water within a newly created network of water temples - providing the Hebron society of sufficient water and attractive spaces. The building is connected to and identifiable for all Hebronites and is the place for worshipping one of the most important elements of life: *Water*.

The building aims to create mixed flows of people with differnt walks of life in order to increase tolerance between the Jews and Muslims and to increase the ability of coexist.

As the Temple of Water has the function to provide the Hebron inhabitants of sufficient water, the building's overall concept derived from the technical, climatological and organisatorial aspects of water. Through the incorporation of social practices around the water in the temple, the building is attractive and accessible for the people to enter, discover and use - while feeling the need for tolerance, coexistence and sufficient... water.

411 early sketch of design section »



### Reflection

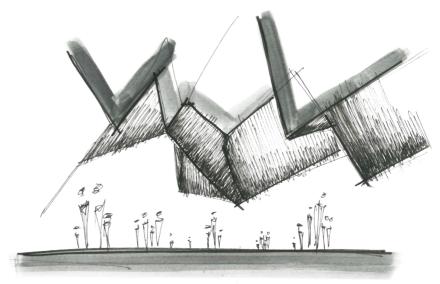
## reflection

### RESEARCH DESIGN

The subject of my graduation project is complex and complicated. A project with the relation to water management in spaces of conflict and opposition of Israel and the Palestinian Territories means that many aspects and (side-)effects have to be taken into account. Besides, the history of the territory and its conflict is essential in the understanding of - and approach to - the conflict from the perspective of an architect. At the start of the project this led to the urge for narrowing down the scope, focusing on certain themes and the definition and determination of several aspects along the itinerary of research and design.

As for the complex context of the topic, I chose to create an extensive understanding of the Israeli-Palestinian context through a wide investigation into a number of different themes, e.g. culture, demography, economy, infrastructure. The creation of the understanding was established by gathering information through e.g. literature, images and videos, drawings, maps and statistics, mapped all together in a research book consisting of themes as earlier mentioned. This contextual research has laid the foundations for the design directions and the choice of the exact location as well as for the specific research, the definition and determination of several aspects and the narrowing down of the scope.

Simultaneously and building upon the gathered information of the contextual research, a specified investigation onto the ability of architecture of water in spaces of conflict and opposition has been part of the full research. This theoretical research was done through a framework of important geographers, sociologists, economists, engineers and architects with the focus on local and national implications of politics, spatial representations of territorial management, water management, water conflicts, future water solutions, the peace process and normalization, the ability of the architect and the meaning of space and implications of representations of space. Through an analysis of precedents in history, the mapping of architectural representations of water management in Israel and the Palestinian Territories and the synthesis of these



413 research by design sketch \*

themes I was able to take conclusions on e.g. an architect's possibilities within spaces of conflict and opposition through the spatial manifestation of water management, and whether this would develop a conflict or diminish conflict situations. This research started the discussion on what possibilities e.g. an architect would have, why and how possibilities would be in the power of e.g. an architect, and the importance of time, external factors, case-specific parameters and retrospective analyses of interventions.

Further on in the process, location-specific analyses of the city of Hebron in the Palestinian Territories have been made for the creation of an understanding of the site and as grounds for the design to place it in context. Mapping and documenting the built environment, infrastructure, control areas and public functions was the first step. Conclusions of the neighborhood structure, permeability, connectivity, range of sound, range of visibility and control and the movement limitations could be drawn from this documentation. Nevertheless it is barely impossible to get to know a place as good as when visiting it. The second step in the location-specific analyses was a trip to the site to see, feel, and experience the space. To involve with the local people, to feel the scale, to gather own resources of visual media, and to draw conclusions of the situation

Throughout the research, for me, designing also was an important research tool as base for the design and the creation of the architectural language of the design. The research by design started early on in the process and investigated the meaning and experiencing of spaces, shapes and materials. The research by design happened through the creation of many drawings of interiors and exteriors of buildings or other spatial elements, but also by trials and attempts through physical models, exploring the experience of boundaries, the composition on street level and the encounter of design decisions.

As for the relation of the research to the design I would argue that the research and the design are strongly and dependently interconnected. The research not only is an investigation into information, it is an investigation into information with the goal to support e.g. an architect in the design and conception process. The design is closely connected to the research as it builds onto the conclusions of the research and uses information and elements of the research in its existence.

The research helped to narrow down the scope, and also the choice of location was rather part of the research than that the research was part of the choice of site. The research onto the abilities of e.g. an architect within spaces of conflict and opposition serves for me as a guide in the design process in order to know how, why and in what direction and perhaps to what extent I, as an architect, would be able to influence the spaces of conflict and opposition in Hebron.

The location-specific analyses not only created an understanding of the city of Hebron, which is really important for the relation of the architecture to the context, it was even part of the design process. As there were no official digital drawings, the location specific analyses were part of the design process in the sense of gathering information and look into detail of what every place of the city would be and could mean. The visit not only confirmed the documented information, it also added new dimensions to the information and add some new information about the site that were helpful in the further process.

Most striking I found the visibility and the importance of the research by design in the design. The research by design as a research technique helped

### reflection

me to define a language and a signature for what the graduation project would become. Unconciously and in retrospective I see shapes and form language in the design project that were part of the research process. The fantasies, dreams, and visions that I had were drawn onto sketching paper and documented in the research book and functions as a library of design choices and design consequences to be built upon.

### METHOD | FRAMEWORK

The graduation project, both design and research, are focused on an extreme example of segregation, antagonism and inequality in society, analysed through deeper layers within territorial water management in the Israeli-Palestinian case. The inclusion, exclusion and seclusion of groups of people - determined by origin and religion (or nationality) translates itself through the management of water. The people in Israel, but mostly in the Palestinian Territories, are being confronted with limitations, mistrust and misunderstanding and social inequality in their daily live. Generations have grown up in a conflict situation, and are reminded by this status at every move; I think it is important to keep making attempts to envision the society de-segregating and non-conflicted.

The *leitmotif* of this graduation project is the approach towards the segregation and inequality of Israelis and Palestinians by national boundaries and territorial management, in which water and architecture play key roles.

The academic research is another step in the investigation to the power and possibilities of architecture. The wide research focuses on the background and understanding of the complex context. The specified research takes architecture precedents as case studies from different spaces of conflict and opposition and draws conclusion from that as a thorough academic analysis.

The design process as a research tool was able to help the design and the decision-making in many ways, and I think this was important also in relation to the subject. Experiencing segregation and boundaries not only plays at national or regional scales and levels, also the experience of boundaries at the building scale is important in a delicate space of conflict and opposition as within the Israeli-Palestinian spaces.

Within the approach towards segregation and inequality, territory and national boundaries, water scarcity and water management, the research as a whole functions as a strong base to conclude what can or cannot be achieved by architecture, and why certain decisions would be or would not be important in the Israeli-Palestinian case and in the Hebron-specific case.

415 checkpoint in Hebron, West Bank »

### PROJECT | CONTEXT

The project 'Embrace diversity: (un)divided Hebron: coexistence through water and architecture' aims for tolerance between Israelis and Palestinians and the possibility of coexistence between Israelis and Palestinians. The project seeks for the abilities of e.g. architect's influence in the field of social relations. The project is highly interconnected to the actual situation in the region, nationally, regionally and locally. Through the architectural translation of a technological concept, into the Temple of Water - a place to worship one of life's most important elements - an attempt is made towards social cohesion and a place for new habits, along with de-segregation of society.

As for the significance in the field of architecture in spaces of conflict and opposition, the graduation project not only is about one building at a specific place, it is also a catalyst and example for other places in Israel and the Palestinian Territories. Besides, the strategy for the approach, research and design could be used as a toolbox or manual for other spaces of conflict and opposition around the world; even for less extreme and clearly segregated spaces.

I think - and I would like - that this graduation project opens the debate on the importance of architecture in relation to spaces of conflict and opposition. I do not believe that conflicts will be solved in easy and single-action interventions, but I do believe in many interventions that work as a cloud of points - a larger all-encompassing system. I would argue that this graduation project lets people think about the influence in spaces of conflict and opposition through both the research findings as the design results, and I would like to think that the research and design of this graduation project would be one of the infleuncing points of the larger system that aims for equalization, normalization and tolerance between the Israelis and Palestinians, in Hebron, but also at any place or context that connects to the Israeli-Palestinian conflict.



## reflection

### Conclusion

The graduation project 'Embrace diversity: (un)divided Hebron: coexistence through water and architecture' is a project in a complex, complicated and historically important space of conflict and opposition. How is this subject approached, what methods are applied and why? How does that relate to the design and what is the meaning of the design?

I think that in the process of the research and the design, at every action, I defined and formulated the itinerary better, clearer and with more focus. The research and the design are strongly connected to each other and also build upon each other's findings and process. I believe that this interconnection helped in the definition and focus of both the research and design and looked for the best-supporting research or design methods on the go. I think in the process, after researching theory, the context and after being at the site, I really found what was necessary for the building to reach its goal - tolerance and coexistence between Israelis and Palestinians. I found ways and manners to connect and identify to the people while not choosing one of the sides. I tried to go to the roots and use the concept of water as pure as possible while translating it to usable architecture.

The project really focuses on the social and contextual qualities, problems and opportunities of spaces of conflict and opposition. I would argue that the project causes people to think about spaces of conflict and opposition and the possibilities and abilities of the architect within those spaces. Also, I would like to see the graduation project as one of the small interventions in a large network of attempts for equalization, normalization and tolerance between Israelis and Palestinians.

Embrace diversity: (un)divided Hebron
TEMPLE OF WATER

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### disclaimer

## Embrace diversity: (un)divided Hebron TEMPLE OF WATER

The graduation project shaped into the Temple of Water, takes place in the Israeli-Palestinian context and acknowledges the conflict between the Israelis and Palestinians.

In the graduation project I focused on the problems of spaces of conflict and opposition in relation to water, as consequence of the Israeli-Palestinian conflict. The representational media of the project are meant to be independent from picking sides, blaming and victimizing any of the parties.

The research and its findings through any kind of media (e.g. text, images, drawings) comes from and is based on information from different sources and media and personal field trips to parts of Israel and the Palestinian Territories in the years 2017 and 2018. The used sources are enclosed in the bibliography chapters of the research booklets.

The choice of sources and the use of sources are chosen as eloquent as possible from the student's perspective, and have been important in gathering information and shaping my ideas on the context and the conflict. The choice and use of sources has come to existence randomly, without a (conscious) selection bias towards or against the opinions of one or the other side in the Israeli-Palestinian conflict.

The digestion and inclusion of sources and quotes in any of the used media do not necessarily mean that I agree with the author, source and/or quote, nor that I mean to spread the same ideas.

The design for the graduation project is a building to be built at (inter-) national borders, (inter-) national border areas and areas that behave as (inter-) national boundaries – regardless of whether these are internationally recognized or not – specifically in water scarce regions.

The building focuses on what in an arid and dry climate is so little available and is able to cause mistrust, misunderstanding and even wars: water.

The design translates to a building that provides space for reconciliation, through achieving one communal goal: the provision of water. The source of life, which is so important in the societies of a dry and arid climate.

Water knows no boundaries. The choice of location does not include any political preference nor proposal, on the contrary, the project - and principally the theme of water - with its public character of the space is destined for people regardless of their origin, religion or other characteristics. The design focuses on the ability to enable reconciliation of people through architecture.

