Studio Anne Holtrop

ETH Zürich

FS23

MATERIAL GESTURE:

SITE PALESTINE

LIQUID SOAP POURED OUT TO HARDEN, seen also a worker carrying ash-Shoka (the fork) to measure the thickness of soap liquid and al-Malij to smooth it accordingly. Also soap pillars (tananir) of earlier patch are seen in the background.


Na'man River
Haifa
Sea of
Galilee
Meditteranean Sea
Jenin
Nablus
Tel Aviv-Yafo
(Israel)
Amman
(Jordan)
Sakiya
Ramallah
Jerusalem
Beit Fajjar Quarry
Gaza
Dead
Sea
Hebron

CONTENTS

MATERIAL GESTURE:

SITE PALESTINE

It is our studio's approach that when all the material aspects of a SITE are taken into consideration: the geology, material sourcing, different physical properties, its associated craftsmanship, specialised technologies, and its cultural and political history, we can deploy the full potential of the inherent materiality of a SITE in relation to its territory.

The SITE we will study and travel to during our seminar week is Palestine. Alongside local experts from architects to chefs and historians, we will study different places of production related to glass, soap, food, and stone. The seminar week will act as a laboratory to test ideas and plays a central role in the development of the projects. Each place of production will be allocated a budget to produce a spatial prototype based on the student's

collaborative research: a space that is born from the site in its material consistency and that is constructed on that site, built, in harmony or contrast, to the previous gestures that have formed the geology of the place.

Studio Anne Holtrop

DESIGN STUDIO

When we take all aspects of the material into consideration – the geology, the sourcing, the industry, the different properties, the craftsmanship, the specialised techniques, and the cultural significance – we can deploy the full potential of the inherent qualities of the material itself and our way of working it in what we call MATERIAL GESTURE.

In this design studio, you will define your gestures of making and working with material(s) through research and experiment, and in response to the topic of the studio. You are required to produce an architecture that results from your specific engagement with the material and the spatial condition you construct with it. The architecture that results from this approach does not reference or represent something but simply attempts to exist as a physical spatial reality in its own right.

Your research should be supported by the knowledge made available by our studio and engaged through you with the use of available resources and facilities at departments of the ETH and from external specialists / fabricators.

Throughout the whole semester, and for your final presentation, we require that you work with physical (fragment) models of your building in the actual material(s). It is important, in this design studio, not to make a complete building, but to show and support the found values of the material engagement in a spatial way, based on the full potential of the inherent qualities of the material itself and your way of working it.

ASSIGNMENT

In this studio, we work in a workshop and laboratory-like setting where you research, design, and test the proposed material. The material and the ways of making are not a presentation outcome of the design studio but rather, an integral part of the process of working, researching, and designing.

There is no given program for the space. This can be chosen at any time in the development of your project and should support the spatial and material conditions that you have set out.

For the final presentation, you are required to make a physical model of your work, or a fragment of it, in a scale of 1:15. The model should show the material and the gestures (the ways of making) and the specific spatial conditions it constructs. This is the key element of your presentation,

along with samples of the material research and test models. You are required to display the material gesture research, drawings of the project, and photos of the model alongside your model on portrait A2 sheets.

The A2 material will be collected in print and digitally in PDF format for the material gesture archive. A semester result book will be made after the presentation. From a selection of a maximum of three projects, the models and material research will be crated and archived for future exhibitions.

FOOD

MIRNA BAMIEH

Mirna Bamieh is an artist from Jerusalem/Palestine. She obtained a B.A in Psychology from Birzeit University in Ramallah (2002–06), an M.F.A. in Fine Arts at Bezalel Academy for Arts and Design in Jerusalem (2011–2013) and participated in Ashkal Alwan Home Works study program in Beirut (2013/14).
Her work attempts to understand the politics of disappearance, questioning notions of land and geographies of in-between temporality. Two years ago she obtained a Diploma in Professional Cooking. From this, she started to develop works using the medium of storytelling and food for creating socially engaged projects through her art practice, through which she aspires to create artworks where food/eating/sharing create an innovative, and fresh way for people to experience themselves and their surroundings, such projects are: Maskan Apartment Project, Potato Talks Project, and for the past three years, a full focus on Palestine Hosting Society.
She participated in a number of local and international shows and festivals, most recently: Sharjah Biennial 15/ UAE, 2023. Tashweesh

Festival, Tanzquartier/ Vienna, 2022. Aesthetic of the Political festival, Bozart, Brussels 2020. Where no Wall Remains Biennial, New York 2019. Qalandiya International, Palestine (all editions). Museum of Fine Arts, Gifu, Japan 2017. Tokyo Wonder Site, Tokyo 2016, 2017. IFFR Rotterdam Film Festival, Rotterdam, 2017. Under the last sky Festival, Berlin, 2016. Halcyon, Transart Berlin Triennial, Berlin, 2016.

She participated in several international residencies such as Vooruit, Ghent 2020, U-jazdowski Castle for Contemporary Art, Warsaw/ 2019, Tokyo Wonder Site, (TOKAS), and Tokyo/ 2016. Art Omi, New York/ 2015. Maroc Artist Meeting residency, Marrakech/ 2016. Marra.tein, Beirut/2014–2015, Kathmandu Contemporary Arts Center, Nepal/ 2013. Delfina Foundation, London/ 2012.

She received several grants and awards such as: CEC ArtsLink International/New York (Autumn 2020), Dr. Georg and Josi Guggenheim-foundation Award/Zurich (2022), Visible Award (long list), 2017. for Goethe Institute Production Grant, 2016.

Her work has been featured on many platforms, such as BBC, Aj+, Hyperallergic, MoMA Ps1, ArteEast, Chronogram, El Comodista, al Ahram, and Yale Theater magazine.

PALESTINE HOSTING SOCIETY: A COLLECTIVE IN THE MAKING

Palestine Hosting Society is a live art project that explores traditional food culture in Palestine especially those that are on the verge of disappearing. The project brings these dishes back to life over dinner tables, talks, walks, and various interventions.

Palestine Hosting Society was founded in 2017, by artist and chef Mirna Bamieh, as an extension of her art practice that often looks at the politics of disappearance, and memory production. Mirna creates artworks that unpack social concerns and limitations in contemporary political dilemmas, and reflect on the conditions that characterize Palestinian communities.

To date, Palestine Hosting Society has created several projects, including THE TONGUE TRACING THE HAND TRACING THE EARTH, MOUNEH: PANTRY WORK, MENU OF DIS/APPEARANCE, TRAILS OF TASTE-TELLING, FERMENTATION STATION, THE EDIBLE WILD PLANTS OF PALESTINE TABLE, THE WHEAT FEAST, A WONDERING IN FLAVORS: THE OLD CITY OF JERUSALEM, A TABLE, A TOUR AND A MAP, OUR JERUSALEM TABLE, OUR NABULSI TABLE, FOOD WALKS: THE TAHINI TRAIL, FAMILY DINNERS.

After an intensive research period for each project, the collective creates

a menu that is shared over one long table for 40–60+ guests, with dishes carefully selected to create spaces of reflection upon socio-political realities, attitudes, and historical practices, and even the suppressed elements of history. Palestine Hosting Society Tables took life in Palestine and in different parts of the world including Palestine, Vienna, Saudi, Amman, Warsaw, Brussels, New York.

THE TONGUE TRACING THE HAND TRACING THE EARTH

The tongue will trace the taste of dishes that are weaved along stories of a kitchen that is dispossessed, the hands will trace the handprints on stoneware ceramic designed to host, add and interact.

This year, unlike the larger scale dinner performances Palestine Hosting Society has been producing since its establishment in 2018, and its research on disappearing recipes and food practices in Palestine, to currently developing smaller more focused dinner experiences that weave eating/interacting/sharing/storytelling and histories of dishes

with pottery design.
The tongue tracing the hand tracing the earth, takes the guests in an experiential dinner setting will be sensorial on multiple levels, from auditory to textural to gastronomic.
Performance Sound composition by Joshua Baerwald and Christie Echols, University of Hartford.
The tongue tracing the hand tracing the earth production was made possible thanks to the support of, CEC ArtsLink, The Invisible Dog, George Lowe pottery studio, and Shiraka research project at Zayed University.
World Premier: The Invisible Dog, Mina's Restaurant/MoMA PS1, 5 performances, 2021, New York
Hayy Jamil, 202, Jeddah.
Tanzquartier, 2022, Vienna.

RUMMANIYEH / HABBET RUMMAN

Rommaniyeh is a Palestinian dish that derives its name from pomegranate. This dish is traditionally from Jaffa and Lod but with political and social changes in these cities, and the expulsion of many from coastal cities to Gaza due to its geographical proximity, the dish is almost forgotten in Jaffa and Lod, but preserved in the Gazan kitchen. It is cooked to this day, especially during the sour pomegranate season, with the addition of spices favoured by the Gazan palette, including dill seeds and red tahini.

Method

1. Boil lentils in 5 cups of water, until tender but not fully cooked.
2. In a cup, combine the pomegranate juice and flour. Blend in a food processor and add flour until smooth.
3. In a mortar, crush the salt with dill and chilli, and add garlic.
4. In a pot, add the eggplants to the lentils and stir over medium heat for 15 minutes.
5. Then add the spices and leave to simmer for 30 minutes. Add the pomegranate juice and keep stirring until it thickens and is fully cooked.
6. Top with fried onions, parsley, and pomegranate seeds.

Ingredients

- 4 cups water
- 1 cup brown lentils
- 6 cups 2 cm diced half peeled eggplant
- 1 cups sour pomegranate juice or sweet pomegranate juice with 3 tbsp. lemon juice OR 2 tbsp, pomegranate molasses with 3 tbsp. lemon juice
- 2 tbsp. flour
- 1 tbsp, chilli flakes
- 1 tsp. dill seeds
- 1.5 tsp salt (adjust to taste)
- 6 cloves garlic
- 1 tsp. cumin
- 1 onion, finely chopped
- ½ cup olive oil
- ½ cup pomegranate seeds for garnish
- ½ cup parsley leaves
- 2 tbsp. tahini diluted in 2 tbsp. of lemon juice (optional)

FTUT BREAD

One of the stable items on Palestine Hosting Society tables is a long-standing bread that goes by many names; Yellow bread, Print bread, Celebration bread or Ftut as mostly called in Nablus, a Palestinian city in the northern region of the West Bank. Many fascinating stories surround the rituality of making and distribution of this bread, they are all moments to celebrate change and transformation. In the past, specially in Nablus, this bread was baked and shared to celebrate young girls when they first reach puberty, as the variety of seeds and spices in its recipe is nourishing and eases menstrual pains, making such moment a celebration of the body's transformation without notions of body shame. It was also baked in many other occasions in different villages of Palestine, such as in the first morning of Eid, on the breakfast table after a month of Ramadan fasting, it was enjoyed along Baladi white cheese and eggs. Another event where yellow bread also plays a part is during the olive harvest season in autumn, where the new pressed oil is used in it, to test the quality of the oil when heated.

Method

1. In a bowl, mix all dry ingredients together
2. Add warm water gradually and kneed well (with hand or dough hook in mixer)
3. Add sunflower oil and kneed more until smooth dough forms
4. Brush dough with olive oil, cover and let it rest for 30–60 minutes
5. After it almost doubles in size, cut in balls of 100–150 gr. portions
6. Brush with oil again and let it rest covered for additional 30 minutes
7. Press each ball on the wood mold
8. Bake in a pre-heated oven at 180 C until golden color
9. (Bake 20–30 minutes depending on your oven temperature)
10. Brush with olive oil as soon as it comes out of the oven
11. Let bread cool down a little, to a slightly warm temperature
12. Stack pieces together in an airtight container and cover

Ingredients

- 1 kilo all purpose flour
- ¼ cup anise seeds
- ¼ cup nigella seeds
- 1 tbsp ground anise
- ½ tsp ground mahleb
- 1 tsp ground turmeric
- 1 tsp sugar
- 1 tsp salt
- 1 tbsp instant or dry active yeast
- 1–1.5 cup lukewarm water
- ½ cup sunflower oil
- ½ cup olive oil

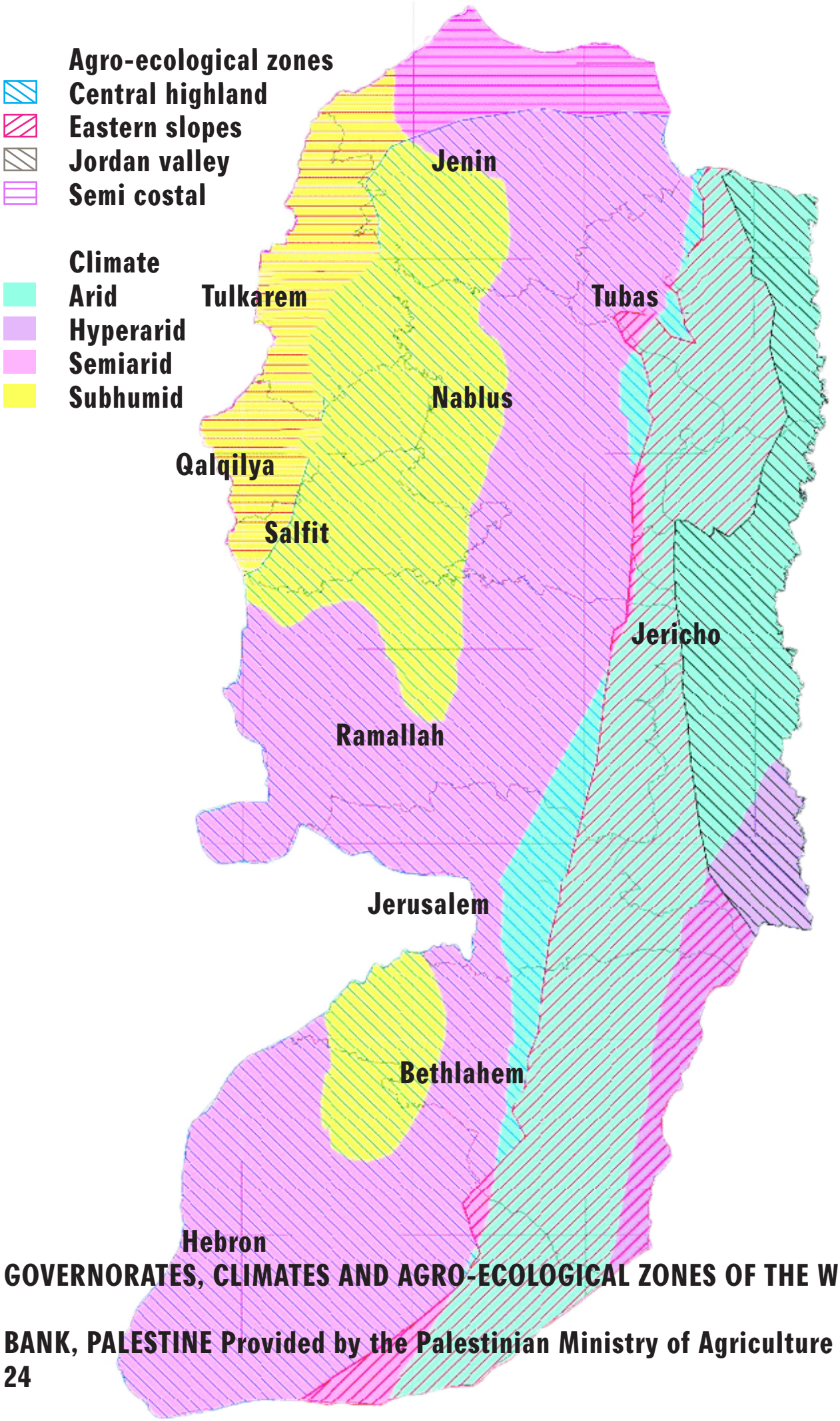
October dinners at the INVISIBLE DOG

Dinner performance of food and ceramics by Mirna Bamieh

Photography credits Amy Pekal

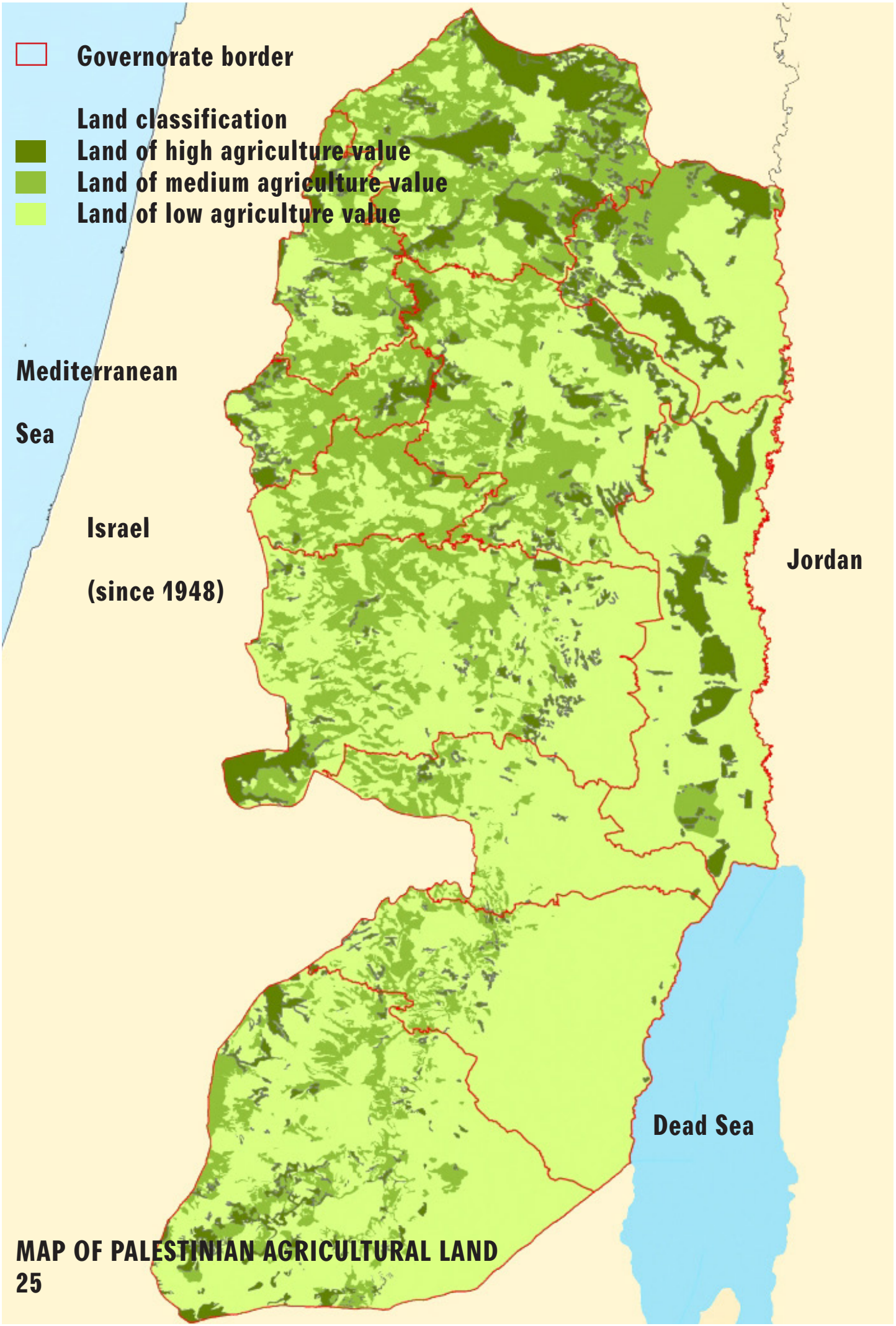
Stills from video SAVING PALESTINE'S FORGOTTON FOOD, Mirna Bamieh

mirnabamieh.info/palestine-hosting-society



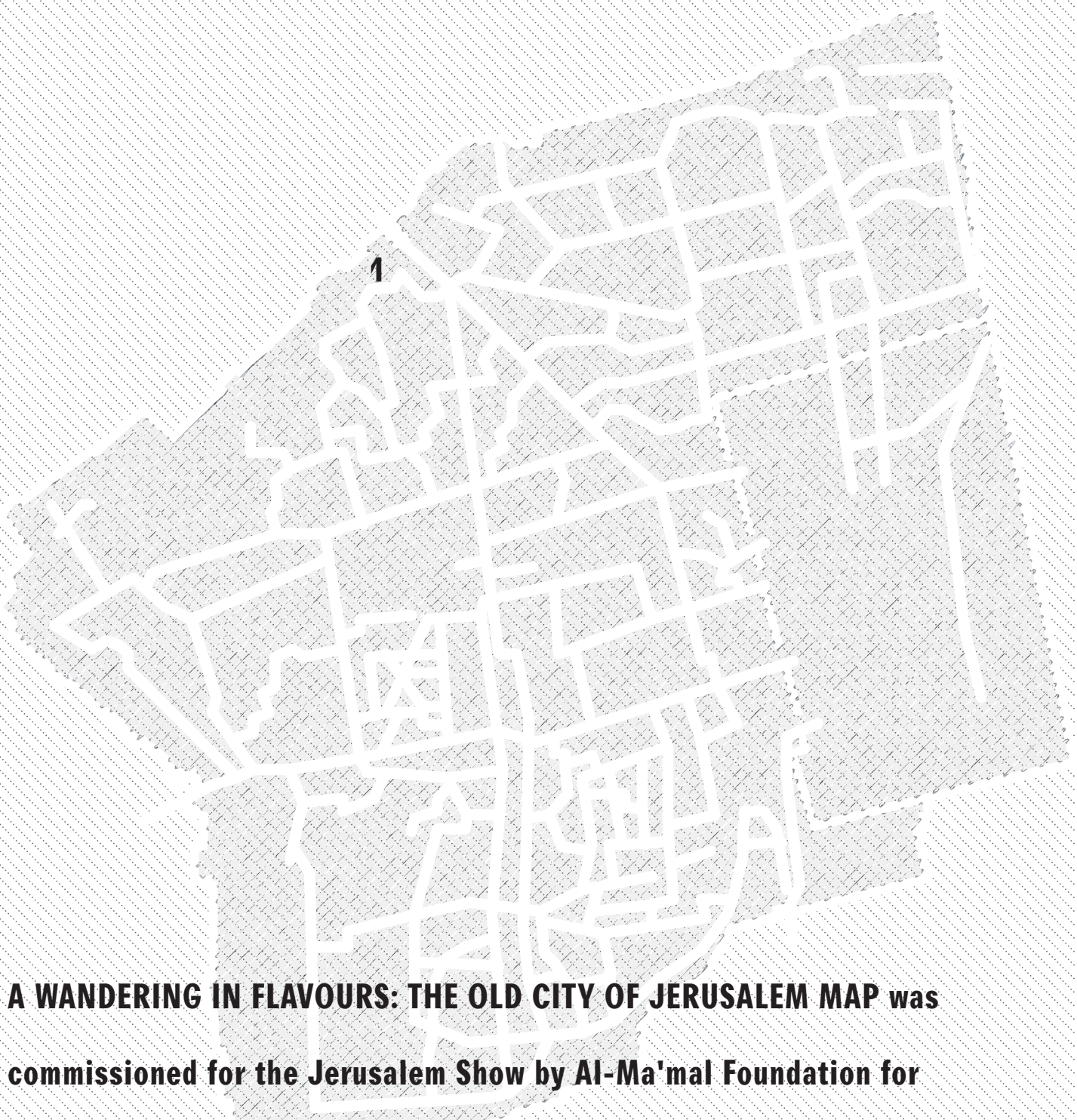
GOVERNORATES, CLIMATES AND AGRO-ECOLOGICAL ZONES OF THE WEST

BANK, PALESTINE Provided by the Palestinian Ministry of Agriculture 2013



MAP OF PALESTINIAN AGRICULTURAL LAND

JERUSALEM OLD CITY SOUQ MARKET



A WANDERING IN FLAVOURS: THE OLD CITY OF JERUSALEM MAP was commissioned for the Jerusalem Show by Al-Ma'mal Foundation for Contemporary Art, and laid out by Mirna Bamieh. It locates each food site that will be visited on our tour, alongside information on who runs the shop and what foods are produced there.

During seminar week expert Mirna Bamieh will take you on a culinary tour of the old city of Jerusalem, in the research of local food practices. We will wander through the overlapping temporalities that inhabit the streets of the Old City. The research trip will focus on the types of foods, ovens, spice shops, and tahini factories on the site, and the connected relationships between farmers, shopkeepers and bakers, as well as engaging in the optics and performance of its sale in the Old City.

In the middle of Jerusalem's Old City can be found a complex of three adjacent souqs, with their present form dating back to the Mamluk and Ottoman periods. These three streets are roofed with arched vaults that are open in the center. The street in the middle is called Souq al-Attarin, which until recent times specialised in oriental fragrances and spices. Currently, however, there are only a few shops along the souq that have kept that old tradition. To the west can be found Suq al-Lahhamin, which consists of a large number of shops that sell meat and vegetables. This roofed-over market street, has been in existence since 1152 AD. The street itself has been in existence since 70 AD. within the span of 125 m the Suq is comprised of 83 shops with none of the shopkeepers owning the site of their business.

1 AL-FALLAHAT

An essential component of Damascus Gate's landmark status is the presence of (1) fallahat (peasant women), selling vegetables carried in from villages surrounding Jerusalem. They favour the long alley of Damascus gate, against pressure to join the vegetable market close to Jaffa gate, which was eventually closed in 1985, and partially converted a souvenir shop. Perhaps the women's usual dress – in beautiful embroidered thobs – is a concession to the impulse, tangible since the British Mandate period, to convert the whole city into a tourist site. According to researcher Amal Nashashibi, before 1948 most fallahat came to the Old City from Lifta and Silwan. After the Nakba, however, the fallahat brought their produce from Al Khader and Artas near Bethlehem, from Beit Anan, north of Jerusalem, and from Hebron. Historically, the produce of the fallahat played an important role in the establishing the kitchen of the Old City, and the flavours of Jerusalem as a whole. They introduced to the market food from northern Palestine, abundant in vegetables, olive oil and poultry, and from southern Palestine, more reliant on dairy products, due to the dryness of its climate. Village women bestowed diversity and eclecticism, upon the cuisine of Jerusalem. Today Palestinian farmers face increasing competition from Israeli farmers, and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produce food in less abundance and variety than in the past. Women are even hired by vegetable shops to sell products on their behalf at Damascus gate, including Israeli produce. This reflects contemporary economic conditions in Jerusalem, in which the politicised 'authenticity' of the fallaha woman, in her traditional Palestinian dress, is co-opted to confer cultural and financial capital upon the food she sells.

2, 3 AL-QAHWA, COFFEE PLACES

Coffee places began spreading through Jerusalem in the middle of the sixteenth century, and became a distinctive feature of the city. Although associated with leisure, coffee shops functioned as crucial gathering spaces for rebellion against the British Mandate government and the subsequent Israeli occupation. In recent decades, however, many of these coffee places have closed. In some cases, this reflects a change in the desires of young Palestinians, with sons less interested in continuing the trades of their fathers. In other cases, coffee shops were specifically targeted due to the political role they played in gathering and mobilising Palestinians in struggle. With the erasure of the physical, social and political space of the coffee shop has also come the loss of one of its most vibrant characters: Al-Hakawati, the Storyteller.

Among the coffee places that were famous in the Old City of Jerusalem are (2) Qahwet Siyam and (3) Qahwet Za'tara in Damascus Gate, and Qahwet Aloun in Bab Hutta. Husam Abu Eisheh, with whom we spoke extensively about the coffee places of the Old City, is an actor and a playwright who based one of his monodramas around Qahwet Za'tara, where his father worked for many years of his life.

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4 AL-JIBRINI SESAME PRESS

This unassuming press looks like a dukkaneh convenience store in the front, but the back room contains the press's two century-old basalt stone, originally brought from Syria. Established 260 years ago, this press has belonged to the al-Jibrini family for 144 years. The Jibrini patriarch was a worker at the press from the age of eight and grew up to become the owner, running the business until the age of 108.

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5 JAAFAR SWEETS

Founded by Mohammed Jaafar in 1949, was known for Ghraybeh and Mamoul, before the introduction of Knafeh, which Jaafar is famous for until this day.

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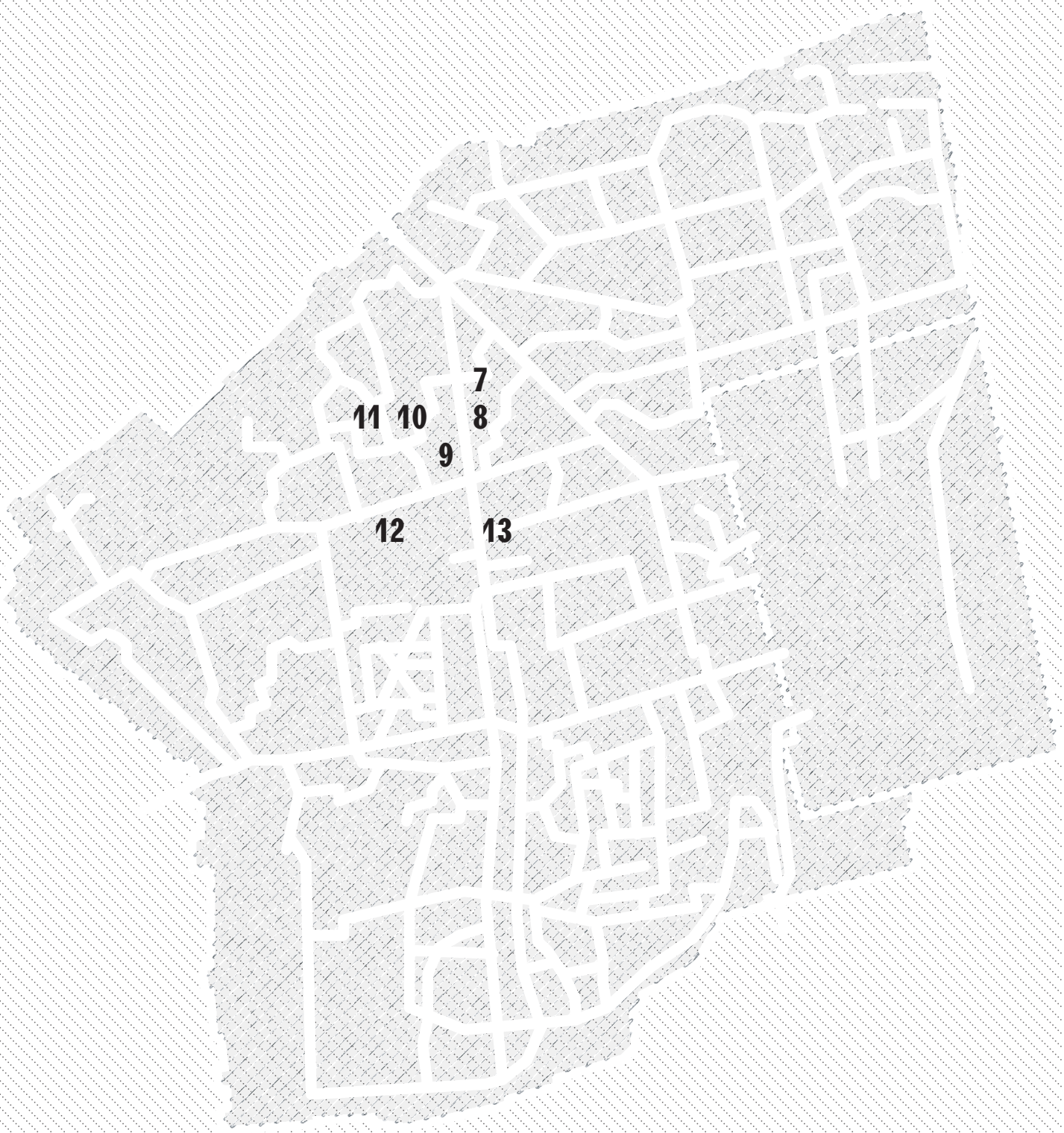
6 SANDOUKA COFFEE

Founded by Ahmad Sadek Sandouka Al-Awadi in 1946.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7 MANBAT AL-ZAATAR

Al Sheikh Qasem's shop used to produce tahini and sell za'atar (thyme), but they stopped the press due to crippling Israeli taxation, only the za'atar remains. The Press was later sold to Al Hashimi Hotel, to become the dining area. The spice shop features a pyramid of ground za'atar at the front of its display, with a miniature model of the Dome of the Rock at the apex.

8 FAMILY RESTAURANT

Originally a butcher shop founded by Abedelatif family in 1938. They were the main dairy suppliers to the Old City, before selling their farm, due to the regulation on local dairy production by Israel.

9 HUMMOS ABU SHUKRI

Abu Shukri opened his hummos shop in 1948 and was succeeded by his sons after his death. Yasser Taha launched the Abu Shukri brand in Al-Wad street. His other brother, Ziyad Abu Shukri, tried to open a bookstore, but eventually went back to his father's hummos business, reopening the small original shop.

10 AL RAZEM BAKERY

supplies Jerusalem ka'ak for many shops and carts at Damascus gate. Ka'ak al-Quds is one of the enigmas of taste in the Old City; legend has it that the water, air and fire of the Old City are what makes the flavour of Jerusalem ka'ak distinctive. We would argue that a certain nostalgia for what the Old City once was helps to sustain the myth of ka'ak al-Quds' unique taste.

11 JABER BAKERY

opened in 1953, makes lahmajun, known in Jerusalem as ‘Armenian sfiha’. The Armenian community that joined Jerusalem during Ottoman times introduced this thin dough topped with meat.

12 HUMMOS LINA

Opened in 1951, Hummos Lina is a family business with two shops in Khanka Alley, previously located on the Via Dolorosa under the name Hummos Linda.

13 AL-`AMAD HALAWA SHOP

Halva became popular during the long rule of sixteenth century ruler Suleiman the Magnificent, who had a sweet tooth and particular taste for halva. He annexed a special kitchen (the bayt al-halwa, or House of Halva) to each of his residential palaces. Al-`Amad is the only halva speciality shop remaining in the Old City. It opened in 1936, in Khan al-Zeit, before moving to its current, smaller location in 1957. The family hand-processes the halva from tahini to final product in their press in the Old City of Nablus. Their signature pumpkin-walnut flavour is a recipe reflective of patriarchal lineage and


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ritual. Kept top secret, the father makes his pumpkin halva alone in the kitchen with the doors shut; the recipe will only be passed to his sons after his death.

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14 TAKIYYA KHASSAKI SULTAN

Takiyya Khassaki Sultan is an architectural Mamluk complex that Roxilana, Suleiman the Magnificent's wife, built as a charitable endowment (waqf) in 1551. The takiyya is a public soup kitchen that feeds the needy and seekers of knowledge in Jerusalem. Various properties throughout Palestine, including the villages in Lydda, Beit Exa, Kufr Qanna, Bir Ma'in and Al-Safrieh, became awqaf (charitable endowments) to provide continual financing for the Jerusalem takiyya. The takiyya is still active from several centuries till now, despite the incessant political turmoil encompassing the city and the loss of awqaf lands to Israel after 1948. Whilst it used to serve only dsheisheh, a cracked wheat-based soup, also known as al-takiyya soup, it currently serves daily lunch for around 200 people, ensuring that no citizen goes hungry, regardless of his or her religion or financial situation.

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15 ZALATIMO MUTABAK

Opened in 1860, at one of the main entrances to the Church of the Holy Sepulchre. For years, it served mutabak, a breakfast staple of Old City inhabitants and visitors. Muhammad Hasan Zalatimo perfected a modified version of the mutabak pastry that he learned during his military service for the Ottomans. The Holy Sepulchre entrance next to the shop was eventually closed. It may have been that relationships made over food had led to other favours – like sneaking clients into church in exchange for money. Some claim Israeli authorities closed the door to better control the flow of tourists. We hear that the men of the Zalatimo family kept the original recipe a secret from their female relatives. Next time, as you taste the pastry, consider the fraught relationships of religion, gender and power consumed with the mutabak.

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16 ARAFAT

Nathmi Idkedek opened this shop – named for his youngest son, Arafat – in 1950. Still run by the family, and it is one of the few remaining places to serve a daily dish in the Old City. The aroma of samen baladi lard fills the Suq al-Khawajat Alley. Majed prepares the maqlubeh cooked in a brass pot, that is then flipped by his brothers Abu Walid and Arafat, every Saturday, Monday, and Wednesday.

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17 AL-SALHI SESAME PRESS

The biggest sesame press in the Old City has been owned by the same family since its foundation over 200 years ago, Every sesame press in


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the Old City produced white tahini, red tahini – made from slow roasted sesame – sesame oil, and kusbeh: a by-product of the separation process by which red tahini becomes sesame oil. Kusbeh used to be the everyman's affordable sweet, and animal herders fed it to milking animals to improve milk quality, and to the mule who turned the sesame grinder.

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18 QAHWET ABU KHADIJEH

The owners of this qahwa made an extraordinary discovery: hidden for decades behind a temporary wall was a large space dating to the Roman period, and underneath the shop lay the gateways to seven tunnels that lead to the seven walls of the city. Such archaeological findings usually trigger extrajudicial requisition of the space by the Israeli authorities; the owners opened the space up as an extension in 2017, and have since fought hard to preserve the cafe and keep it in the family.

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19 ABU SNEINEH BAKERY

Some claim it to be the oldest inside the walled Jerusalem. Among other things they make barazeq, a crispy sesame biscuit, that in the Old City seems to be baked significantly thinner, larger and crunchier than its counterpart in other regional recipes.

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20 BULGHOURJI RESTAURANT

In the backyard of this Armenian restaurant, you can spot the rusted machinery of Kiljian bulgur factory, that used to widely supply bulgur to Jerusalem and West Bank for 80 years, since 1920.

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21 HARB SHAHEEN BAKERY

Opened in 1953, specialises in qurshalleh, a crunchy biscuit to which Palestinian visitors to the Old City flock, and a staple of Jerusalem tables particularly at the suhhur, the dawn meal during Ramadan

TAHINI IN THE OLD CITY OF JERUSALEM

Khan al-Zeit in the Old City of Jerusalem took its name from over the ten tahini presses that inhabited its alleys over 200 years ago. The production of tahini and sesame oil was centred in Jerusalem and Hebron until Nablus took over the market with white tahini, after the seclusion of Jerusalem from the West Bank in 1967. While sesame oil has long been a staple in Palestinian houses for cooking and medicinal use, the economy of sesame oil production has declined since the introduction of cheaper, imported vegetable oil to the market. Only two sesame oil factories have survived in the Old City, still using the cold-press technique with the same basalt stones installed over two centuries ago.

RESTAURANTS OF THE OLD CITY

The increasing disappearance of al-akal al-sha'abi, served in Jerusalem's Old City restaurants, reflects the social and economic changes afflicting the population. Historically, most restaurants used to serve hummos, foul and fatteh as breakfast fare from dawn to late morning, replacing them at noon with more complex recipes of kafta, lahmeh 'a-warqa (meat-stuffed vine leaves), maqlubeh, and offal roasted with garlic and lemon. Shop owners who came to work without a lunch box, safartas, would share their meal at a common table, or buy food from local restaurants to eat with neighbouring shopkeepers in front of their shops. As both food prices and Old City rent have risen in recent decades, shopkeepers' earnings have become too low to afford to eat out daily. Without the social rituals of collective eating, fuelling the economy of shops and restaurants in the Old City, many old eateries have closed, or transformed into souvenir stalls. Today food is consumed in the Old City predominantly by day visitors, rather than those that live and work in its streets; few restaurants still serve daily dishes. Among the restaurants that no longer exist are those of Abu Taher, Abu Ali Al Mushasha, Abu Hassan, and Abu Keda.

BAKERIES AND PUBLIC OVENS

Throughout history, bakeries and public ovens have provided a source of fresh bread and a place for those with modest homes, to bake for themselves. Such spaces and facilities also gathered people to socialise. People could send their bread, their trays and pots of food to be cooked over the wood fire of these shared ovens. Qidreh, kafta, and maqlubeh, would travel from private homes to public ovens and back, bringing with them community updates, care, and renewed social ties. It is said that Jerusalemites

knew maqlubeh as bathinjaniyya, for its reliance on eggplants, until the time of Salah al-Din, at which point the wider circulation of the dish to other cities opened up its recipe. This Jerusalem dish par excellence, began to receive vegetables more available in other climes, cauliflower and other vegetables increasingly became the main vegetables in the dish.

This practice of sending food out to bake has vanished almost entirely, as each ‘modern’ house has a private gas or electric oven. What remains from this practice, however, are the 27 wood-fire bakeries dotting the Old City, many of which have existed for over one hundred years. Most now specialise in pastries, with each one claiming fame based on its preparation of ka'ak al-Quds, barazeq, sfiha, or egg manqusheh. The Israeli authorities' current enforcement of regulations against the use of the wood-fire ovens, however, seems likely to force bakeries to switch to gas ovens. If this happens, the Old City will lose yet another distinctive flavour of its history.


Rice & Soup
Rice & Meat
حب هال
Cardamom
הֵיל

JERUSALEM OLD CITY SOUQ MARKET

Images by Mirna Bamieh
41

A2

JERUSALEM OLD CITY SOUQ MARKET

Images by Mirna Bamieh

During seminar week alongside our expert Mirna Bamieh we will visit a second site, Sakiya, where we will be given a wild plant tour to forage materials. We will then take part in a cooking class on Zarb earth cooking.
Sakiya is an academy for experimental knowledge production and sharing, grafting local agrarian traditions of self-sufficiency with contemporary art and ecological practices.
Sakiya's core programs engage food production, exhibitions, symposia, publications, and education/ training workshops, exploring the intersections between art, science, and agriculture in a sustainable and replicable model.
Sakiya's site is a rewilded hillside populated with olive groves and agricultural terraces, two of which are used for Sakiya's permaculture farm. The farm, situated across from the lower house, produces a variety of fruits and vegetables, such as tomatoes, peppers, cucumber, courgettes, aubergines, gourds, mallow, chard, rocket, and many other fresh greens. Near the upper house, there are two herb gardens growing an abundance of different aromatics for tea and cooking.
sakiya.org

SITE HISTORY

Sakiya's site is a unique nature reserve with significant scientific, architectural and aesthetic qualities, on a stretch of land in the Zalatimo Estate on a hill in Ein Qiniya on the outskirts of Ramallah. The site has two historical houses, the first was built during the late Ottoman period, and the second dates from the British Mandate era. The site also includes Maqam Abu El-Ainain, a holy shrine from the Ayyubid period, a fresh water spring and wildlife.
The two historic houses are the architectural centerpieces of the site. The late Ottoman house is one of the very few houses of that period to have moved away from the dense fabric of the village center towards the secluded wild hillside that could only be reached by a single horse or donkey (rather than a carriage or an automobile). The other house, built during the British Mandate era in 1932, is unique as is the only example of British mandate era architecture in Ein Qiniya. The houses have suffered from measurable physical deterioration that would be irreversible if left unrestored. The restoration of the first house had been initiated in autumn 2018 after the needed research and surveys were prepared. The restoration of the house is supported by the A. M. Qattan Foundation through the VAFF Grant funded by Sweden.
Maqam Abu El-Ainain is a holy shrine located on one dunum within the site belonging to the Islamic waqf, and consisting of one room that is partially built in a cave and another room built as an iwan, a vaulted

room with three walls and one side completely open. The site has been known for pious visitations or pilgrimages to the tomb or shrine by the local community.

The Zalatimo family bought the houses in 1937 and lived on the site and farmed the surrounding lands until 1967. The family had a great attachment to the land to the extent that members of the family who had work in Jerusalem commuted back and forth on a daily basis. In addition to this, family members and friends would gather from Damascus, Amman, Jerusalem and Lud to reside on the land for three months every year during the summer. The Zalatimo family members and friends from Jerusalem, Lud, Damascus and Jordan lived on the site for several months during the Nakba in 1948. After 1967, the family were prohibited from living on the site and were restricted to day visits by the Israeli Occupation Forces. The two buildings have since been abandoned, resulting in physical degradation, vandalism, and the loss of what once was the center of a thriving agricultural community.

The renovation of the Sakiya houses was led by architects Sahar Qawasmi and Iyad Issa, over the course of 2018–19. The renovation process is ongoing, and will see the eventual development of the site into a working residency space, office and gallery.

The specificity of the natural environment of the Sakiya site informed a distinctive approach to the renovation process. The site, unlike the historic centers in many Palestinian villages, is a mountainous natural environment within an agricultural area, where agriculture is slowly decaying despite the availability of water. It is also located on the margins of Ramallah, the fastest-growing Palestinian city. The built-up part is a fraction of the total area of the site.

The intervention methodology sought to use restoration and rehabilitation as an exploration of the relationship between the built and natural environment by exploring the temporal and physical layers of the site through three axes: the surrounding environment, the traditional building and its components, and the raw materials and characteristics of the building, so that at each stage the restoration process responds to the sensitivity of the surrounding site.

THE ANCIENT OAK TREE ON THE SITE

A VIEW OF THE LOWER HOUSE FROM THE FOOT OF THE HILL IN EIN QINIYYA

LOOKING INTO THE VALLEY ON THE WALK UP TO SAMRIA

ZARB EARTH COOKING

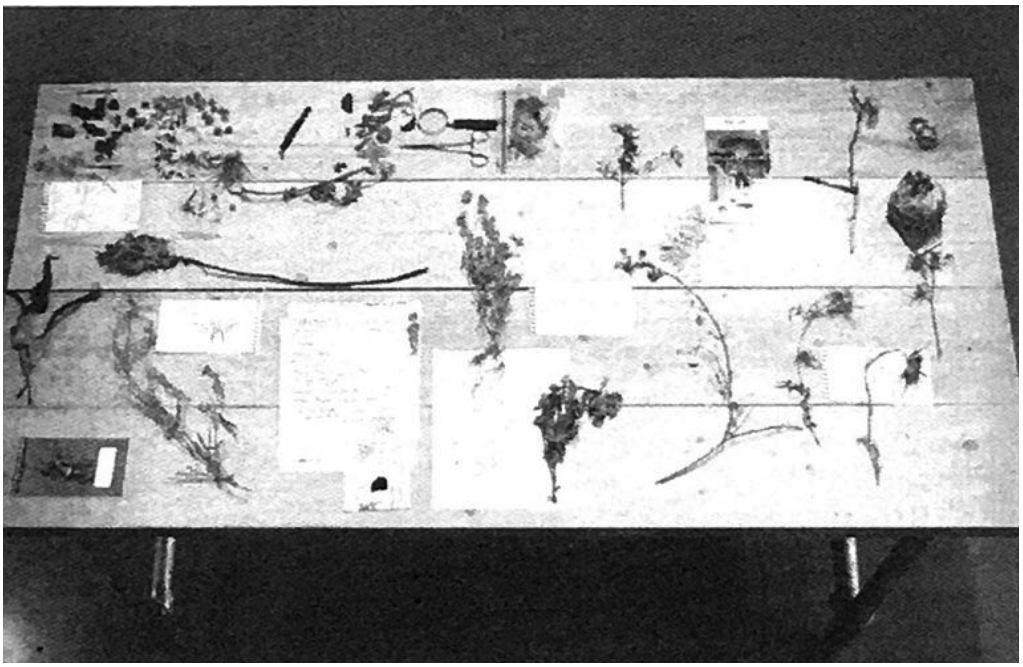
ZARB EARTH COOKING

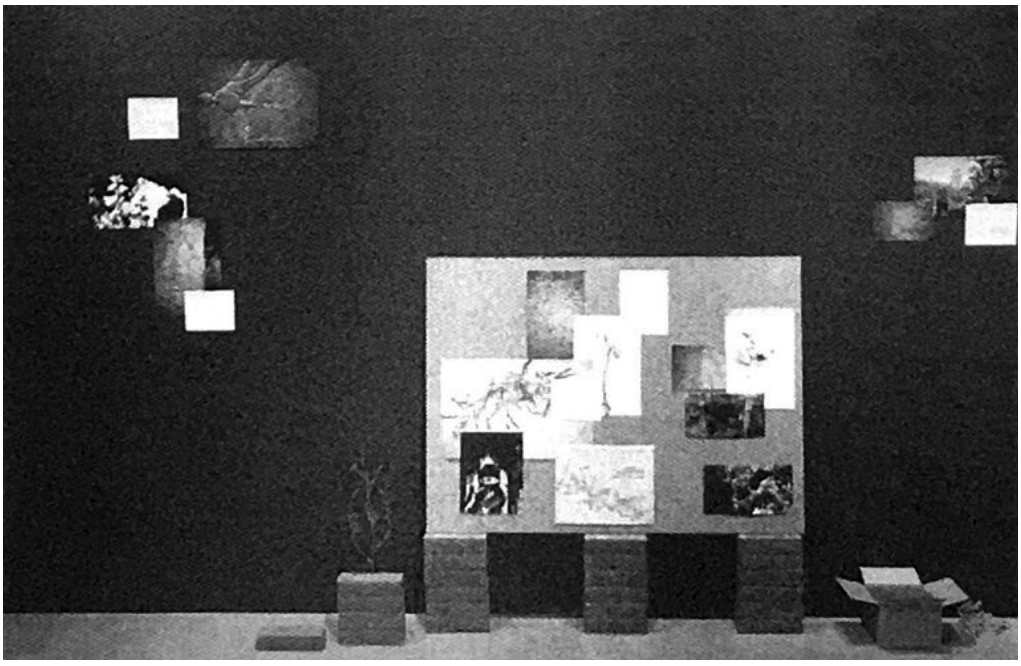
This cooking technique has origins in the livestock herding cultures of the Bedouin tribes. Traditionally days revolved around shepherding. Days started early with animals taken to graze, however, due to the desert heat, herders would return before midday as the hot middle part of the day was spent sheltered from the sun. In the early afternoon, the animals and herders would then return to livestock grazing only to get back to the camp at sunset. This schedule meant that food preparation was one of the important tasks to complete in the middle part of the day. Families would be away from the camp in the late afternoon, posing the risk of sand, predators, and vermin that could destroy any food left unguarded. Thus became the solution of the Zarb. Families would be able to prepare their meals during the midday heat, place the food underground and leave it cooking for several hours so they could return at sunset to uncover it and eat their evening meal.

Process

1. **Start fire in a pit and reduce to coals**
2. **Place the prepared food on the grill plates ready for cooking then lower the food into the Zarb, with the items that need the most cooking at the top**
3. **Cover the Zarb with a metal pan and shovel a sand layer to sufficiently prevent heat leaving the oven. Leave to cook undisturbed for around three hours**
4. **Brush away sand and uncover oven. Remove cooked food.**

RELEVANT WORKS





AND YET MY MASK IS POWERFUL, 2017

from Ruanne Abou-Rahme and Basel Abbas's exhibition
56

In the gallery space, filmed and audio-recorded footage from the expeditions to the destroyed villages (a five-channel video projection and two-channel sound and sub-woofer) was projected through a thick green filter. In addition, the galery displayed a vast documentation of the artists' research process, including video stills, photography, drawings, poetry, journalistic notes the two took before and during the visits to the destroyed villages, computer desktop screenshots of their various Google searches, and a hand-noted catalog from the Israel Museum along with various other texts about Neolithic masks. In addition to these images and texts, the artists presented a vast collection of flora and dried vegetation collected during their tours.

Writing about an artistic trend, which he calls 'digging,' the curator Dieter Roelstraete recently warned us about the "the archeological imaginary in art": A steadily growing number of contemporary practices engage not only in storytelling, but more specifically in history-telling... With the quasi-romantic idea of history's presumed remoteness...these artists delve into archives (this is where the magical formula of 'artistic research' makes its appearance) and plunge into the abysmal darkness of history's most remote corners. They reenact...reconstruct, and recover... One of the (most privileged) ways in which this historiographic 'turn' has manifested itself lately in through a literalised amateur archeology of the recent past: digging.

The main problem with 'digging,' Roelstraete tells us, is that the aura of the past becomes so great that the artists are no longer able "to grasp or even look at the present, much less to excavate the future." And Yet My Mast, which documents acts of return to destroyed Palestinian villages, and situates the artists in the position of "researchers, as they display their research process," may seem at first to fall into the 'digging' trap described by Roelstraete. Quite the contrary, though, I argue the work is a deliberate attempt to "excavate the future."

FACE TO FACE WITH THE ANCESTORS OF CIVILIZATION (chapter four),

Ruanne Abou-Rahme and Basel Abbas's archive of the copy,

on the work of AND YET MY MASK IS POWERFUL

Still from Jumana Manna's video FORAGING (2022), at MoMA PS1

(shows Palestinians gathering wild akkoub and za'atar)
58

Jumana: “The film involves a personal and family history that I know very well, which happensto intersect with many things that I've been researching and dealing with over the years. It looks at the criminalisation of herb picking cultures in Palestine and Israel, specifically around the wild growing of za'atar (thyme), and akkoub, (a relative of the sunflower). Akkoub tastes a bit like artichoke. It's prickly and hard tocollect and prepare because of its thorns. Israel has banned the foraging of thesefood plants and the film portrays the dramas around foraging practices that continue, despite the prohibitive laws. It also looks at how the continued practice of foraging becomes an act of resistance as this law comes to represent the occupation at large, the management of the land and its sovereignty. In other words, who owns the landand who gets to decide what takes place on it?”

BREAK, TAKE, ERASE, TALLY

Made from ceramics and newspaper. The series of ceramic bread fragments mimic the practice of leaving stale bread outdoors for an unknown receiver, tracing the transformation of an object of desire and nutrition into the anxiety of uneaten food/waste.

View of exhibition by Jumana Manna at MoMA PS1 from September 2022 to April 17, 2023. Image courtesy MoMA PS1. Photo Steven Paneccasio.

GLASS

DIMA SROUJI

Dima Srouji is an architect and visual artist exploring the ground as a deep space of rich cultural weight. Srouji looks for potential ruptures in the ground where imaginary liberation is possible. She works with glass, text, archives, maps, plaster casts, and film, understanding each as an evocative object and emotional companion that help her question what cultural heritage and public space mean in the larger context of the Middle East as well as a focused lens on Palestine. Her projects are developed closely with archaeologists, anthropologists, sound designers, and glassblowers. Srouji is currently the Jameel Fellow at the Victoria & Albert Museum and leading the MA City Design studio at the Royal College of Art in London. Her work is part of the permanent collection at the Stedelijk Museum Amsterdam.

HOLLOW FORMS

Hollow Forms is a glassblowing project founded in Palestine in 2016 that aims to reveal the hidden history of the material in the region and shed light on the continuing skills of the craftspeople in Palestine. Hollow

Forms is part of the permanent collection at the Stedelijk Museum Amsterdam and was exhibited in multiple global platforms. Dima is currently a fellow at the Victoria & Albert Museum where she is continuing the research process on glass from the region.
The process is done in collaboration with the Twam family in Jaba' a historic village between Jerusalem and Ramallah. The Twams has 40 years of experience with glass with three generations in the same family working in the shop in their home.
Our goal for Hollow Forms is to shed light on the history of glass in Palestine through research in collaboration with archaeologists, historians, and glassblowers. To fund this ongoing work, we are using contemporary design to support ourselves to avoid relying on any kind of external funding. To disseminate the information and knowledge we collect, as well as the process of making our collection, we are aiming to produce a documentary on the history of glass in Palestine. This will not only cover the research including the connection between the ground, the human breath, and glassmaking to our land but also introduce the Twam family in the way that they deserve to be portrayed.
We believe that contemporary design has the ability to generate a story, activate a fragile industry, and continue to celebrate our incredible history of craft in Palestine.
The work we do at Hollow Forms is not only focused on the contemporary design collections, and generating new pieces consistently, but we are also fascinated by the relationship of the ground, sand, silica, and our rivers, to the history of glass in Palestine.
We're also incredibly energised to decolonize our misrepresented material culture after a century of colonial excavation, looting, and displacement. We love the idea of contemporary forgeries, designas a form of restitution, and the possibilities of imagining liberation and return through these vessels. We are named Hollow Forms for a reason, we believe liberation, healing, and return can fill these vessels.
hollowforms.studio

ALMOST ROMAN, RESTITUTION & FORGERIES II

The collection is a series of contemporary forgeries and a critique of the value system placed on Roman vessels and jugs from Greater Syria found in multiple global museum collections. The colours used are extracted from Roman architecture and aim to capture the essence of the natural materials used in Roman glass as well as natural

dyes including plant ash, dried herbs, and natural rocks and minerals. The forms are slightly twisted to bring them into a revivalist space that embraces forgeries and questions antiquities and art market value structures. Only small adjustments and tweaks are required for the vessel to travel in time from the Roman Empire to today denying linear chronology. Each piece is hand blown in Palestine.

GHOSTS

This ghostly collection is formed of replicas of displaced archaeological glass artifacts from the Levant landscape currently stored and displayed in western institutions including The Metropolitan Museum of Art, Penn Museum, and The Roval Ontario Museum. The chosen vessels are seen as critical forms in the construct of the global south's imaginary but have been uprooted and stuck in a specific time and space without being able to tell their stories in a contemporary light. Each object is tracked to identify its provenance, donor, and current status and whether the objects were donated by strangers, anonymous, or foreign experts to these institutions. Each vessel is drawn, rendered and

Hollow Forms: ALMOST ROMAN, RESTITUTION & FORGERIES II

then reproduced, as a ghost of the original, by expert glassblowers in Jaba' Palestine. The replication of these artifacts aims at shedding light on both the cultural weight of the artifacts themselves as well as the weight of the ancient history of glass blowing in the region. The collection celebrates the formal language of each vessel by bringing the forms into a regional and global contemporary setting. Exhibiting these forms in the Levant is particularly special, a form of restitution for these displaced artifacts as this design week is accessible to a local and regional audience dedicated and rooted to this ground we stand on. This is all in an effort, as mentioned, to breath life back into archaeological artifacts as well as reactivate the glass blowing industry in our region.

Hollow Forms: GHOSTS


HEBRON

THE NATSHEHS FAMILY WORKERS IN THE 1920s. The furnaces have remained

in the same traditional construction as seen here.

HEBRON GLASS

During seminar week our main site of production is Hebron Glass, a furnace space in Hebron run by the the Natshehs family. They have been working for seven generations, since the 1700's and it is the same family present there today. There are multiple glass centers in the region, in Akka, Caesarea, Cairo, Sido or Jaba, archelogical sites show they are also ancient industrial sites for making glass. The site in Jaba run by the Twam family now works with silica flame blowing unlike furnace work seen in Hebron.

"All glasswork we do embodies real old stories of Palestinians, unique shapes and patterns. Every home used, and still uses, the glass we make in Hebron as a Palestinian tradition. My brothers and I learned from my Father Taw q. My father learned from my grandfather Abed Alhamid Khalil Natsheh. Our handicraft has been proudly inherited from generation to generation and each family member needs at least five years to learn the skills," Natsheh says.

Hebron Glass aims to partner with fair trade associations and uses recycled bottles from local homes and businesses as the raw base material in many of their products. The fuel for the ovens and furnaces is repurposed motor oil from local garages.

Natsheh says the Israeli-Palestinian conflict and constraints on freedom of movement in Palestine have impacted the industry, but by recycling these everyday materials, Hebron Glass is able to keep the craft alive and sustainable.

While the precise process is a family and trade secret, the techniques that the artisans at Hebron Glass use to make their hand-blown glass and hand-thrown ceramic pieces have been used for hundreds of years.

"The glass depends on the high skills of the artist who faces the high temperatures of the hot fire," Natsheh explains. "The glass is fused under approximately 1000 degrees Celsius until it becomes liquid and suitable for blowing. We use a kammasha (steel pipe tool), which is 1 to 1.5 meters long. We leave the piece as soon as it finished in a near room to the oven for cooling down slowly. We recycle and use Coca Cola glass bottles as main raw materials, and we use colouring powders with plain glass during the blowing stages.

Hebron Glass has exhibited at Santa Fe International Folk Art Market in Santa Fe, New Mexico; Salon des métiers d'art du Montreal, Québec; the London Chamber of Commerce art fair; International Festival of Glass UK; Muscat Festival, Oman; Ten Thousand Villages; and most recently, the Cultural Survival Bazaars.

HAND-BLOWN PHOENICIAN GLASS

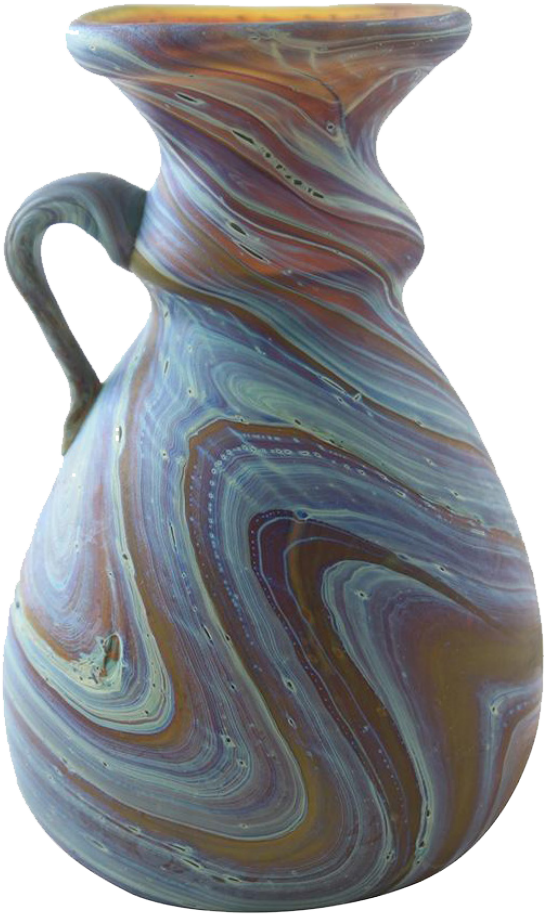
Some of the glass work that continues today in Jaba and Hebron, Palestine

resembles some of these fragments that can still be extracted from archaeological sites. The textures were historically produced from a mixture of plant ash from plants found on the coast as well as ground seashells. The marbled effect found in the 'Phoenician' glass in Palestine today is a continuation of the aesthetics of the process of production created centuries ago. 'Phenic glass' bottles, are made according to the process of immersion in molten glass by sticking a matrix of sand or ground, then fillet slices or colored powder is placed on the surface of the bottle to decorate it. Then let it cool down, and rub the inner part of the sand or floor vial that formed the matrix, before polishing.

PLANTS OF THE MIDDLE EAST & THE PRODUCTION OF GLASS

Chemical analyses of ancient glass and historical descriptions of their production show that the ashes of plants were used to make them. The plants grow in semi-desert and evaporite environments in the Middle East and elsewhere. This use of plant ash used with silica dates back to the Bronze Age (2500–800 BC). This process was also used during the Sasanian and Islamic periods. The process was much later exported to Venice and Murano in the 14th century.

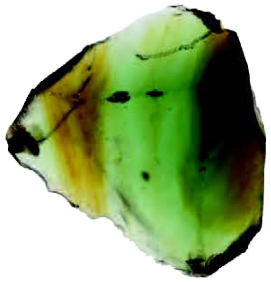
THE HEBRON GLASS WORKSHOP
72



HAND-BLOWN PHOENICIAN GLASS

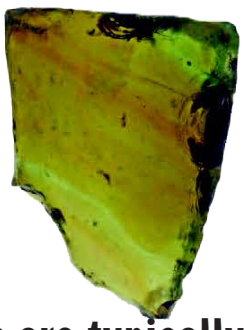
An example of the type of phoenician glass work produced in Hebron today.
73





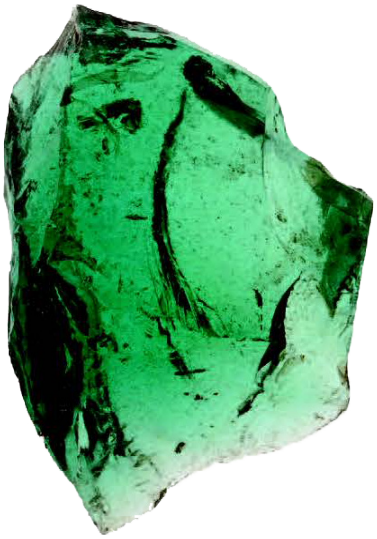


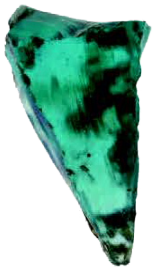




RAW GLASS

Large quantities of raw glass chunks with swirls of colours are typically found around ancient glass workshop locations.





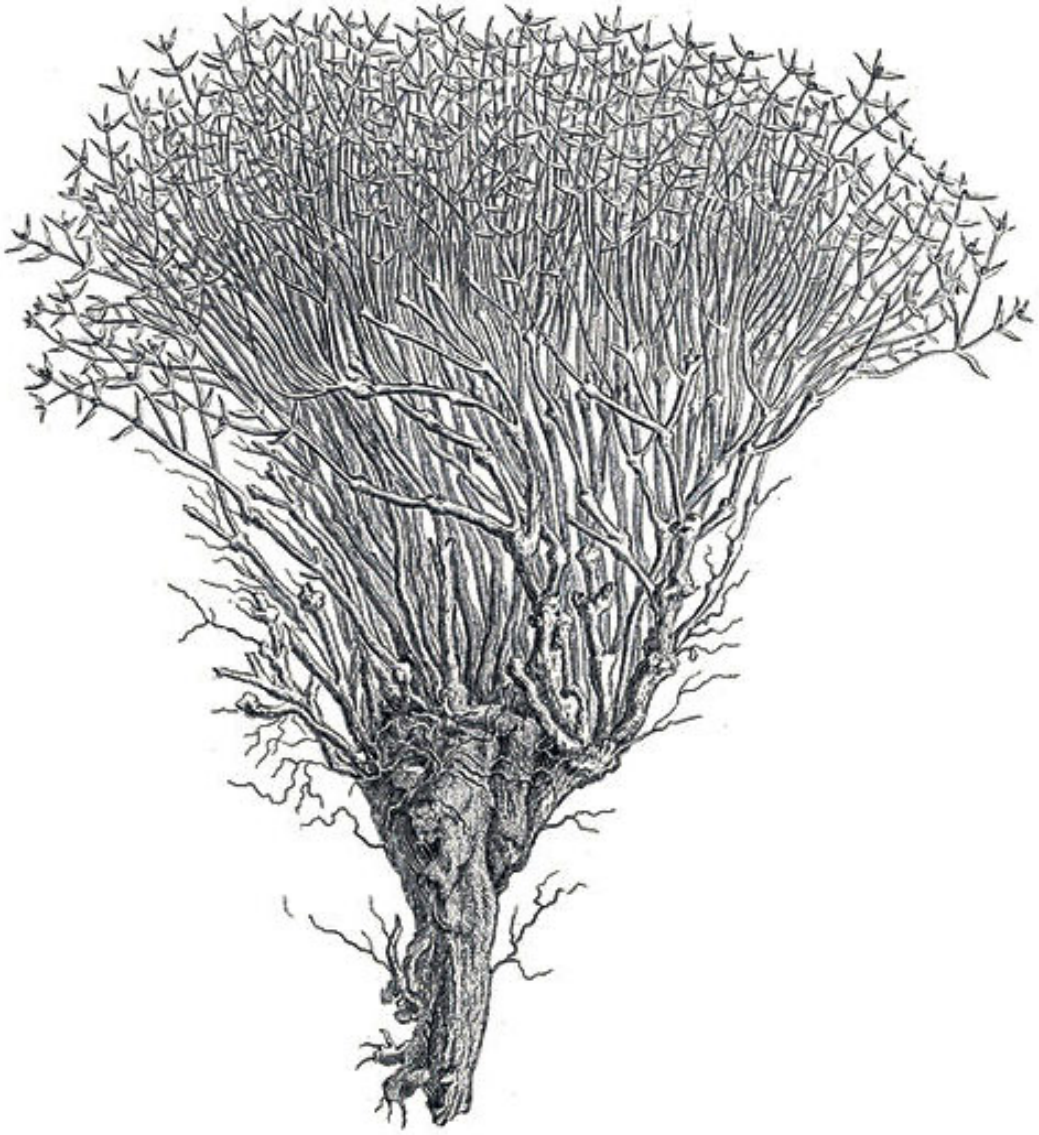




Raw glass chunks were traded and purchased for remelting in furnaces;

they are mentioned in ancient sources, e.g., the Babylonian Talmud

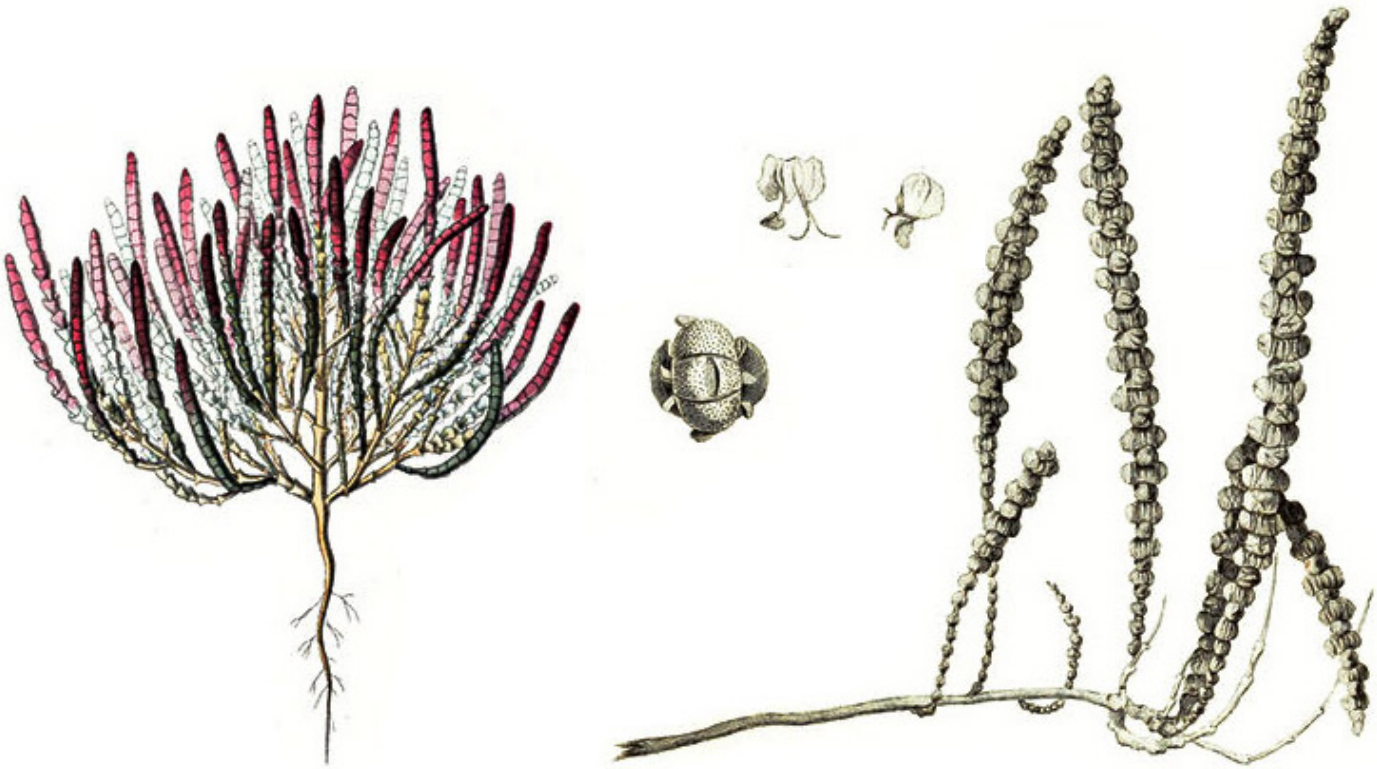
(Weinberg 1988:25)



MICROCNEMUM, HALOPEPLIS and ANABASIS

Plant Ashes from Syria and the Manufacture of Ancient Glass by Youssef

Barkoudah and Julian Henderson, Journal of Glass Studies Vol. 48, 2006
76



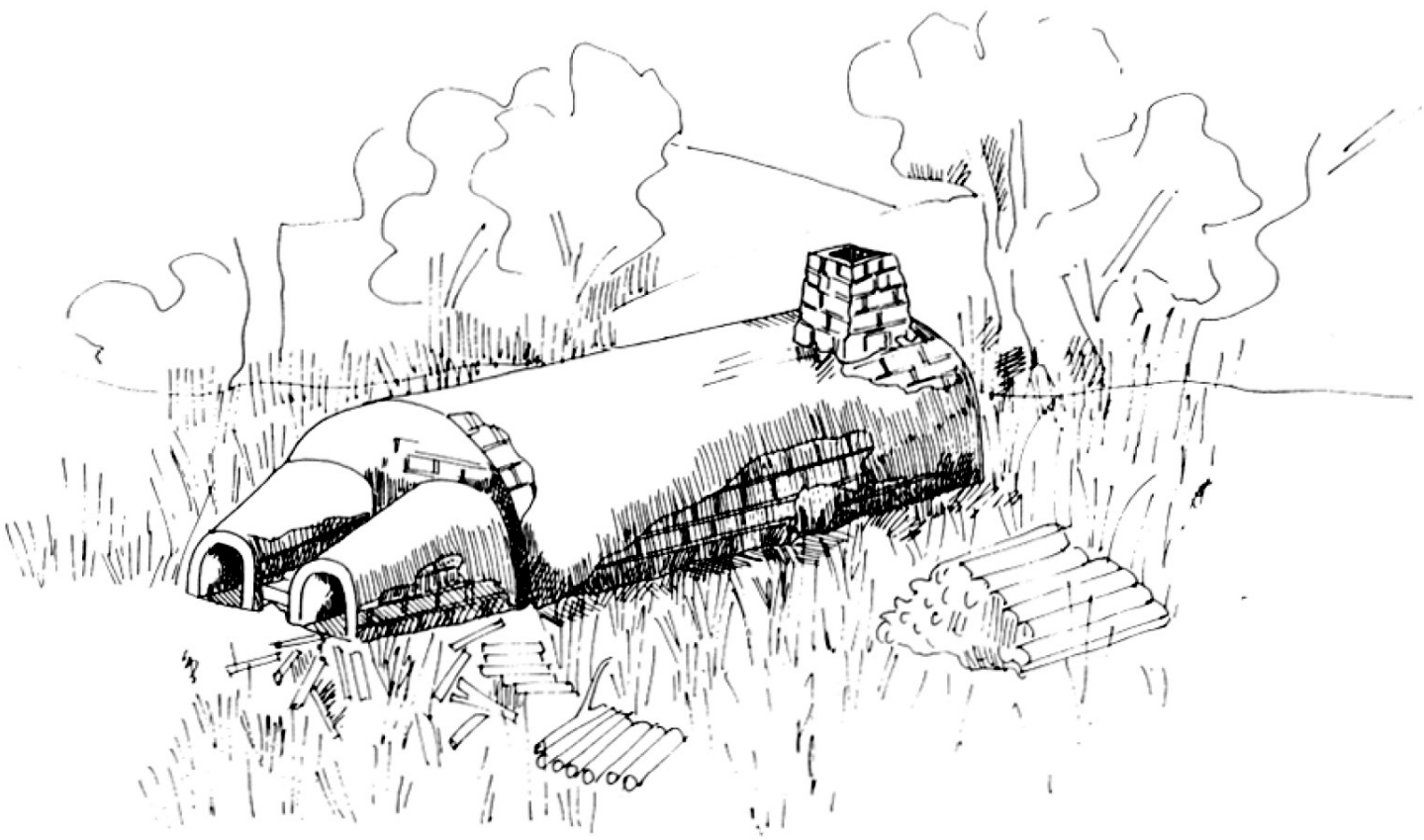

BELUS RIVER

Our second site we will visit during Seminar week is The Belus river, today called the Na'aman stream which flows south of the city of Akka. The Roman historians Pliny and Josephus connect the coastline of Akka with glass production. Josephus records a magical spot outside the city where sand enters on one end and leaves the other site as a river of glass. It is said that historically the river was a site of prayer as its waters and sands were considered magical and somewhat spiritually linked.
This Roman source is the earliest written testimony of glass production in Palestine.

The picture on the right is a reminant of glass at an archaeological site – situated at the mouth of the Belus River – until the 80s or 90s after an excavation the site there was an abundance of leftover manufactured glass, as the area around the Belus River was the manufacturing hub during the roman empire, if you go excavate at the mouth of the river you would still be able to find and collect these reminents. From this evidence we understand that the first colour was this lime green blue and it comes naturally from material from this specific river, and would change colour at different points of the river.

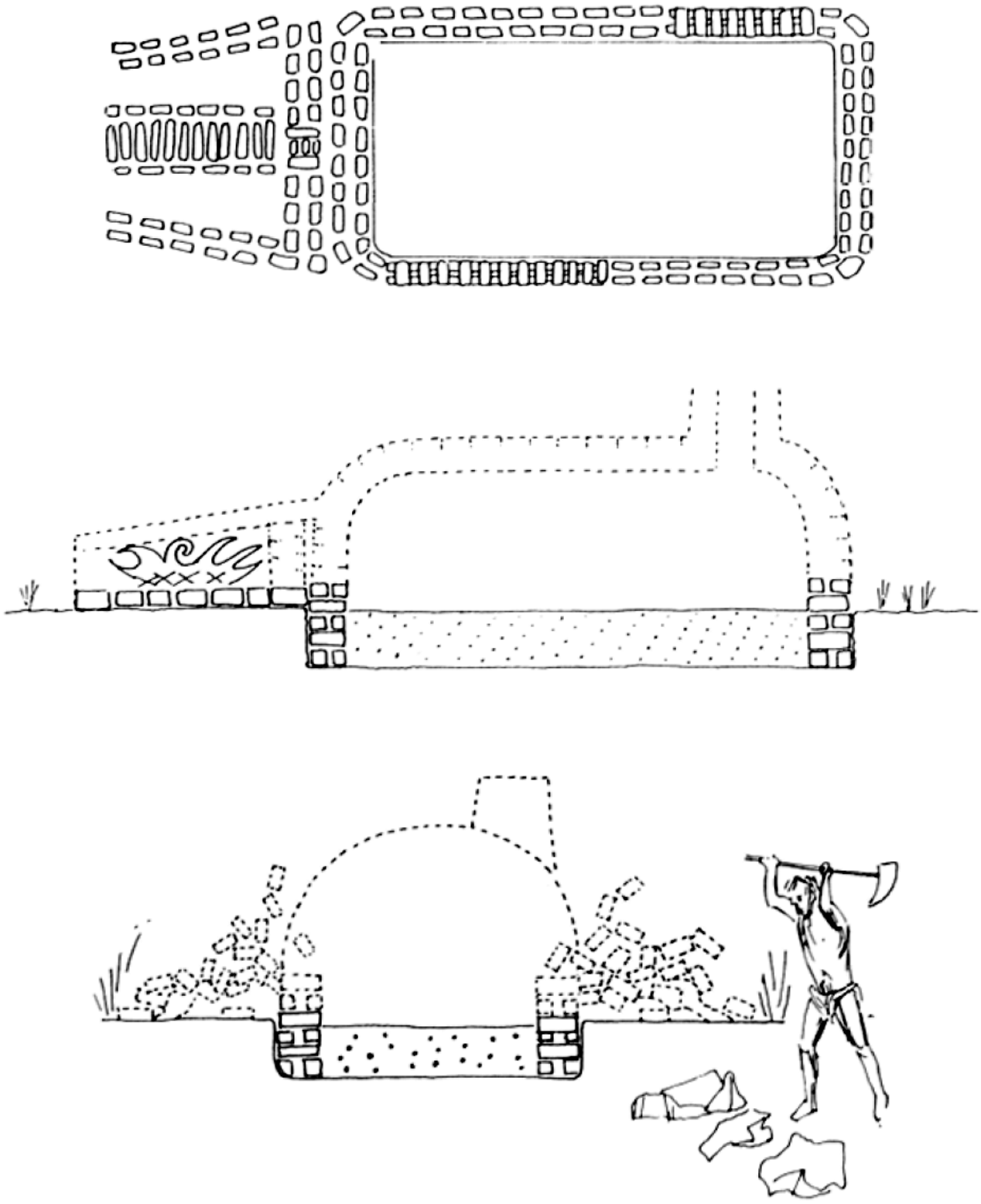
HERITAGE

MOSAIC FRAGMENT, ca. 3rd–7th century BC, Sasanian, glass, stucco, pigment



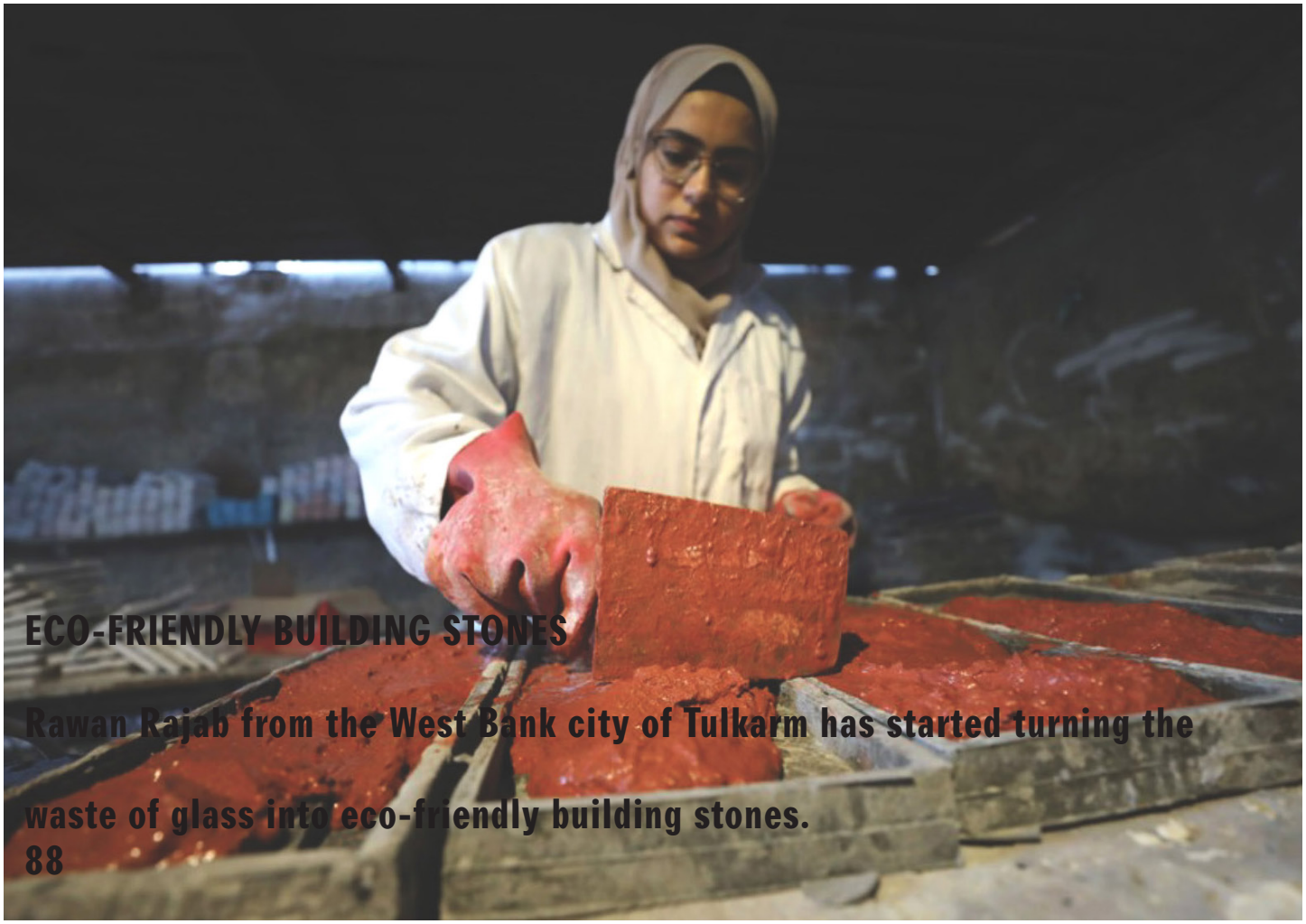
RECONSTRUCTION OF A FURNACE

Bet Eli'ezer; Drawing M. Miles
86



RECONSTRUCTION OF THE PLAN AND THE SECTION OF A FURNACE

Bet Eli'ezer; Drawing M. Miles
87



ECO-FRIENDLY BUILDING STONES

Rawan Rajab from the West Bank city of Tulkarm has started turning the waste of glass into eco-friendly building stones.

TRADITIONAL GLASS FURNACES IN PALESTINE

Excavations revealed remnants of 17 ancient glass furnaces in Khirbet Qazaza, also known as Rami Zayta named after the production of glass. This many furnaces links the site to the mass production of ancient glass. The furnaces are constructed of mud bricks that become glazed on the interior surface over the glass production process. The structure is comprised of two melting chambers, the larger measuring 2×4 meters. All openings face southwest to utilise seasonal winds to aid in accelerated air circulation. The fire lasted 10 days and the heat reached 1100 degrees centigrade. The furnace is deconstructed to extract the glass slab that is then cut into smaller chunks to work with. Theglazed bricks are reused after the deconstruction.

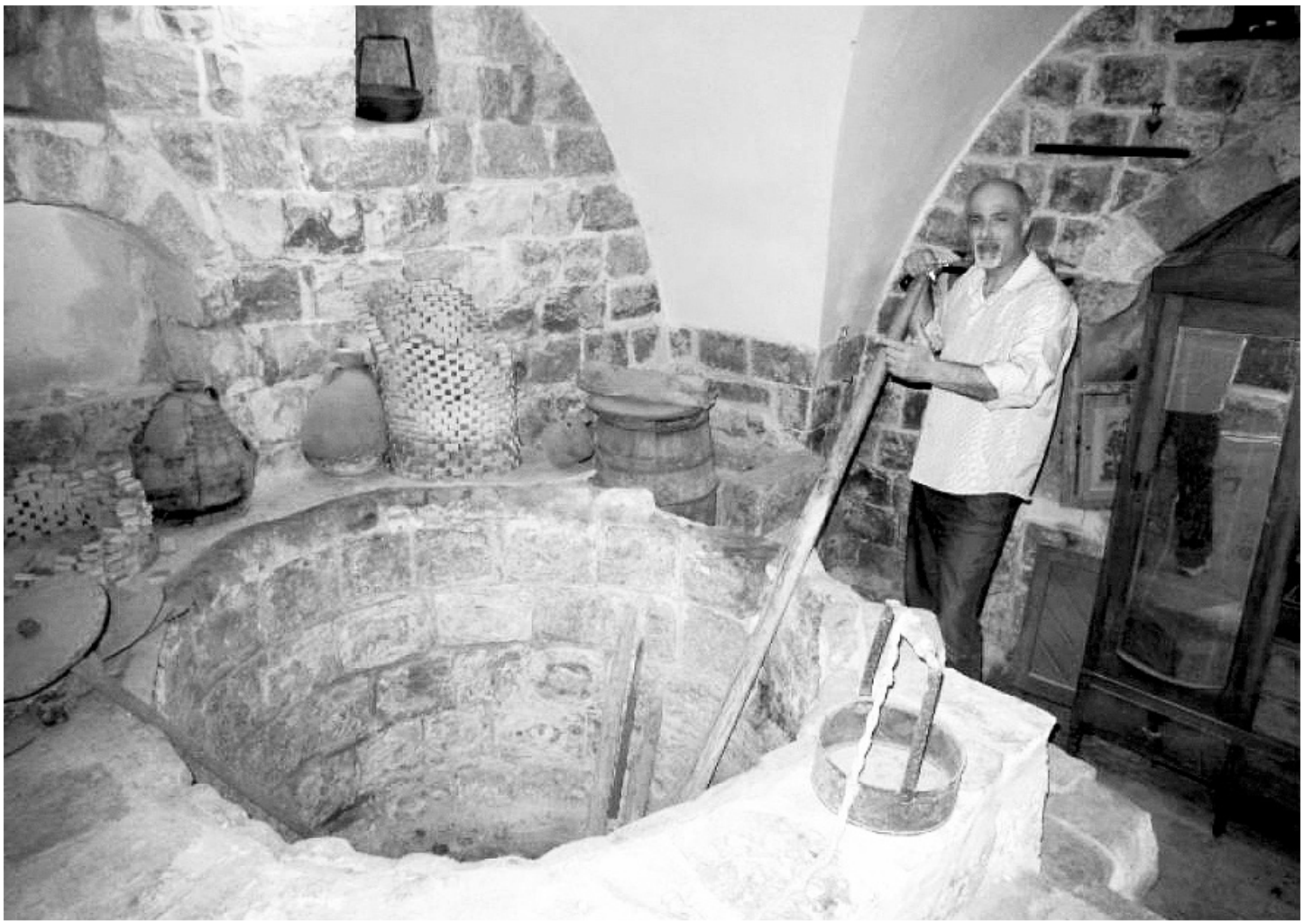
GLASS WORKS IN PALESTINE

Palestine's glassware industry dates back to the 1st century, established during the Roman rule in Palestine where the technique was applied to make bottles and vessels, as well as large flat dishes. Seen in images on page 86 are some of the earliest examples of glass use in architecture:
Image on page 86 (up) is dated back to between the 1st century and 3rd century CE, currently stored in the V & A archive in London, it was used to let light into bathhouses, being slumped and blown into a hollow form and inserted into different architecture spaces to let light into space. collections.vam.ac.uk
Image on page 86 (down) is a ancient window fragment from Samarra dated back to between the 1st century and 3rd century CE. It is a 3D diamond shaped hollow object, around 10cm diameter, that was mouth blown in moulds in Iraq but the raw material comes from Bet She'arim in Palestine. They were used alongside mother of pearl for plaster cast wall panelings. There's currently one on display at the V & A in London.
Image on page 88 is a Glass cosmetic flask with four compartments (kohl tube), dated from the 4th–5th century CE, Roman, Palestine. The glass was blown, trailed, and tooled. It was made from a single inflated gather by pinching and folding the sides vertically to make a diaphragm, the four handles were applied over the tops of the vertical trails, drawn up and out, and down, then turned inwards and dropped onto the top edge of the rim. Four trails, one on each tube were drawn down vertically, and trailed off on the lower body, and finally decorated with horizontal tooling indents. metmuseum.org/art/collection
Image on page 89 is a glass jar with marvered trails. 5th century CE or later. Roman, Syro-Palestinian. Two marvered trails wound in a spiral from rim to bottom.

GLASS SLAB AT BET SHE'ARIM
(page 87) This is an example of a failed glass slab at Bet She'arim. The dimensions of the slab are 3.4×1.95×0.45 meters. This is a failed experiment because what is usually found is a glass slab broken down into cubes and then exported for mosaic pieces, the only evidence you would normally have is the leftover glass melt on the mudbrick, so this is a very rare example of what the slab would have looked like. It is quite architectural and was used for mosaic floors such as the example of fragment pictured. In 1999, Ian Freestone and Yael Gorin-Rosen posited that the great glass slab at Beth She'arim dates to the 9th century CE. Therefore, rather than being an example of typical Roman period glassmaking, the slab represents a transitional phase at the beginning of early Islamic glass production, when glassmakers began to replace mineral natron with plant ash as a fluxing agent. The early Islamic date proposed by Freestone and Gorin-Rosen has been generally accepted by other scholars.

ECO-FRIENDLY BUILDING STONES
(page 92) Rawan Rajab from the West Bank city of Tulkarm has started turning the waste of glass into eco-friendly building stones. She came up with the idea when she witnessed how broken glass waste injured many children in her town and she thought about how she could help her neighbors get rid of this waste without getting hurt. "I decided to turn that waste into colored building stones that would be used for decorations of homes, restaurants as well as some offices."
First she collects the glass waste from the debris of houses, the streets and surrounding areas. After she gathers enough glass waste, she begins the process of grinding it to a powder. She then puts the mixture into a small machine that turns it into white sand. After that, she mixes the white sand with regular sand, water and other materials and then pours everything into iron moulds ready for firing into bricks.

SOAP

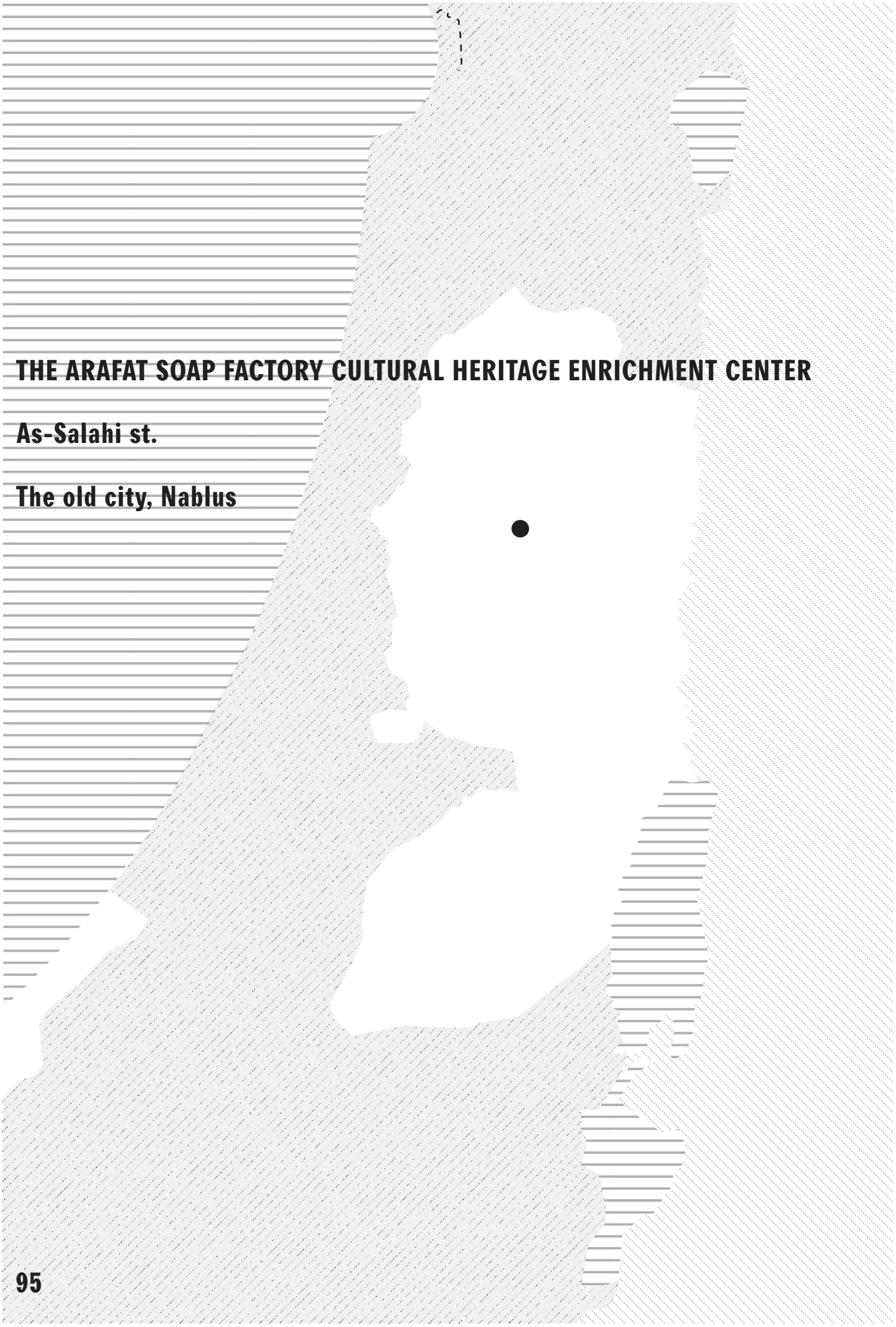


NASEER ARAFAT

Naseer Arafat is an architect, development, and planning specialist, who has indepth knowledge of archaeology, conservation, and cultural heritage of local soap production. He has supervised several conservation and urban regeneration projects in Jerusalem, Nablus, Hebron, Ramallah, and a number of villages in Palestine and has gained international experience through study projects in London, Fez & Dar Al-Salam, and Stone Town in Zanzibar. He led the architectural survey teams for the National Registrar of Historic Buildings in Palestine, part of the RIWAQ team. The work covered six major cities and more than 250 villages, it was implemented in cooperation with the various local authorities and technical support from the Ministry of Local Governance and the Ministry of Planning. Naseer is the author of 'Nablus, City of Civilisations', published in 2012. Also producing a tour guide and map for the city of Nablus, published in 2022.

Naseer is currently working as the cultural heritage consultant of Universal Group for Engineering & Consulting on The Comprehensive Spatial Development Plan for the city

of Nablus 2030, and also for the State of Palestine 2050 as well as co-running the Arafat Soap Factory Cultural Heritage Enrichment Center in Nablus.
Information on soap production in Nablus presented in this book includes excerpts from the book 'Nablus the City of Civilizations', by Naseer Arafat, Published by Nablus CHEC, 2012.



THE ARAFAT SOAP FACTORY CULTURAL HERITAGE ENRICHMENT CENTER

As-Salahi st.

The old city, Nablus

THE ARAFAT SOAP FACTORY CULTURAL HERITAGE ENRICHMENT CENTER

During seminar week we visit the Arafat soap factory, which is no longer a producer of soap and has transformed into a cultural heritage enrichment center, it will function as a place for us to study and build at. In order to work with the raw material we will go to the neighbouring functioning soap factory: Tuqan Soap Factory.

Built between 1880 and 1918, the Arafat Soap Factory is located in the middle of the old city of Nablus, near Al-Hanbali Mosque. It is part of a huge compound that includes the house of Sheikh Amr Arafat and its diwan (reception hall and guest courtyard), in addition to the soap factory. These buildings lie within a hosh (a private residential compound) and are arranged around three courtyards.

The Arafat family, the traditional owners of this hosh, is one of the indigenous families of Nablus.

Its distinctive houses display the characteristic features of traditional architecture in the old city of Nablus. The main distinguishing features are the spaces that satisfy the social needs of the owners, represented by the diwan. To fulfill the family's economic needs, a soap factory had been built on the ground floor adjacent to the diwan. The soap factory was donated for public use by its owners, Afaf Arafat and Saba' Arafat, and was renovated in 2004 by Naseer Arafat, as a multicultural heritage center.

Part of the 900-square-meter building has been made into a museum that showcases the traditional tools that were used to make soap as well as tools for other important local handcrafts. In addition to offering workshops in soap making, the center regularly hosts artist workshops, particularly ceramics workshops with artist Nisreen Barghouthi. Children, young adults, and students, as well as persons interested in art, architecture, and cultural heritage can gain knowledge through the library, which houses a small collection of books as well as a lecture hall that offers opportunities for audio-visual display.

FACTORIES, DESIGN AND MANUFACTURING

Soap factories are among the most important buildings in Nablus.

For centuries the city's soap manufacturers played a significant economic role in Palestine. Nablus was the center of the industry, with thirty-three distinct soap works or factories built during different periods[1].

Six adjacent soap factories gave the street connecting al-Qaryun and al-Yasminah quarters its name, al-Masabin Street – the Street of Soap Factories. The architectural design

of a soap factory is very particular. In its internal and external details, it accommodates the needs of manufacturers without creating an imbalance in the surrounding environment or disturbing the integrity of the urban scene.
The external facade of the building matches that of its neighbours. Nonetheless, a soap factory is easily recognisable by the wide gate at street level and the large windows on the first floor. The rooftop chimney is an additional distinguishing feature.
Unlike modern factories, normally located in industrial zones, soap factories in Nablus were established within residential areas as they created no great disturbance in these districts, operating in silence and without unpleasant odours or noxious emissions. The only pollution from the factory is produced by the burning of environmentally friendly fuel such as wood, almond shells or al-Jift (olive stones and pulp after pressing). Petroleum-based oil has recently replaced olive wood fuels, to the detriment of the environment and health.
The smoke itself is tolerable, but even this rarely affects the neighbourhood as the factories are the highest buildings in the locality with their chimney-tops protruding above the rooftops.
Because of changing methods of soap manufacture, traditional ways have lost ground, with different factories now employing different processes. The number of skilled soap workers has decreased; wages are low, the work is hard and the craft as it is traditionally practiced is only mastered after lengthy training and experience.
Undoubtedly, soap manufacturing represents an important part of the Nabulsi's cultural heritage and impacts its economy and it is felt the protection and development of this industry should be maintained as a national priority.

1) Researchers disagree on the number of soap factories in Nablus. The reason being is that written records are confused since factories' names changed according to the names of their successive owners and the historical period in which the record was compiled. Additionally, where buildings have been destroyed there's little information to relate to the historical record. In spite of this disagreement, the author supports the opinion that the full number of past and present factories in the old city or around it is thirty-three. This number does not include modern factories in the industrial zone outside the residential areas and city limits.

ARCHITECTURAL DESIGN

The layout and design of the soap factory reflects the manufacturing process and the different functions of the workers. This is accomplished in a single building by placing the stages of manufacture on different levels. The production lines inside the factory work in a streamlined sequence. The large wooden entrance gate facilitates the entry and exit of the camels and other pack animals bringing in raw materials and delivering the finished product to the market. The gate incorporates a small door (Khukhah) for visitors and factory workers. The factory building itself is large, with a wide floor area. Strong load-bearing walls are

essential. The roof always consists of criss-cross domes resting on the wall corners or on huge medial pillars or beams. The aim was to have the largest possible area on two floors of the factory, the size of the first-floor being of particular importance for production process.

AL BALAT or THE FLAGSTONE

The ground floor is called 'Al-Balät' (flagstone). A number of wells dug on the ground floor to store olive oil, an essential ingredient of Nabulsi soap. The ground floor also accommodates a number of storage rooms and other areas for raw materials and the finished product. The soap is manufactured on the ground floor, in a round pit with a copper or metal pot at the bottom. The whole fixture is called al-Hallah, but the word is frequently used for the metal pot itself. The pot's diameter is 1.5–2 meters and it is lowered into a stone structure. The upper diameter of the stone well is larger than the diameter of the copper Hallah to facilitate the removal of the mixture during manufacture. Some factories have more than one Hallah and their number and size reflect the total output of the factory.

There is a small underground chamber (al-Qammim) below the pot. This is reached by stairs and is where wood and other material are burned. Adjacent to al-Hallah on a lower level, a small basin around 0.5 meters in diameter is found, this is called 'al-mabzal' and is connected with a controlled opening for removing the water which results from the manufacturing process. Next to the Mabzal, stone rectangular basins are used to prepare al-Khamir, sodium hydroxide or caustic soda. While the first batch of soap is being manufactured additional oil is poured into a small well at the side of al-Hallah, al-Junayb, to be heated. The factory has wells of different sizes for oil storage, with capacities varying from 50 tons of oil to a minimum of 5 tons required for one batch of soap. A stairway near al-Hallah leads to the first floor, al-Mafrash, where the Soap is then spread out to dry.

AL-MAFRASH

The Mafrash is a wide room, equal in area to the ground floor, with large windows and a flat, smooth, levelled floor. The five-meter-high ceiling provides good ventilation needed to dry the soap. The room's name is a description of its function. The liquid soap is carried up in pots from al-Hallah and poured out onto the floor. When it solidifies it is cut, stacked, dried out, and packed.

THE MANUFACTURING STAGES

Soap making has a number of stages that are carried out in sequence by a team of skilled craftspeople, each specialising in a particular stage.

This brief description has benefited greatly from research carried out by Professor Husam ash-Sharif[1].
A ready-made concentrated solution of sodium hydroxide is put in the al-Hallah (soap boiling pot). In the past, alkaline sodium was prepared by mixing al- Qili (the alkaline ash of the ash-Shih plant from the Jordanian desert), lime, and water to ferment the solution but today has been replaced with sodium hydroxide. Throughout the process, some operations are done successively. For example, water, alkaline sodium, and salt are continuously added and stirred. Much above the base of the al-Hallah pot a pipe with an outlet tap leads to a semi-circular half-meter basin (al-Mabzal). The al-Mabzal basin stands in a recess below the level of the ground floor. Next to it are small stone basins used to prepare al-Khamir, the concentrated liquid sodium hydroxide that is added to the watery substance drawn off into the al-Mabzal. The fortified mixture is returned to the surface of the al-Hallah pot. The stirring continues, and the fire is tended until the worker has decided that all the olive oil has turned into soap.
When the workers are satisfied with the product, water is added to the mixture which is then stirred and boiled. This operation is called Ash-Shatfah (the washing), and is necessary to give the soap the right consistency and to get rid of any excess sodium and impurities in the oil. The solution is then boiled for a period of 10–15 hours during which the extra water separates and sinks to the bottom, where it is removed. At this point, the thick viscous soap needs to be spread on the upper floor of al-Mafrash.

1) Research findings into this industry were being published when part of this book was written. For more details, please refer to the booklet entitled 'Sina'at as-Sabun an-Nabulsi' (A-Nabulsi Soap Manufacturing) by Husam Abbud ash-Sharif.

Spreading After the soap has been left in the copper pot overnight, the spreading operation begins. The solution of sticky soap is poured onto the floor of the al-Mafrash, which has been covered in paper to prevent the soap from sticking. In the past the floor was covered with lime instead of paper. A worker flattens the surface of the soap with a al-Malij, and gauges its thickness using ash-Shökah (the fork), after which the soap is left to dry. The drying period varies according to the weather.

Cutting and Stamping the Soap Once the soap is dry, smooth and of uniform thickness. The dimensions of the cakes of soap are worked out and marked by the use of the compass, the set square and the ad-Dubarah. Then the white squares are gently stamped with a seal at the end of a wooden hammer. After that the soap is cut. The workers attach the knife around their waists. As they walk backwards

the knife is pulled through the soap. This operation requires muscular effort and extreme accuracy.

Drying After cutting, the drying process begins. The soap is left on the floor of al-Mafrash for one to two days. When it is fully dry it is carried to the sides of the room and stacked in conical structures exposing the maximum surface area of each cake to the air. These arrangements are called Tanânir (plural of Tannür, a traditional furnace). The diameter of at Tannur is wide at the bottom and narrows towards the top. This both ensures stability and helps accelerate the drying process. The drying process itself generates heat with an accelerating column of increasingly warm air moving upwards through the cone as cooler air is sucked in at the base, forming a continuous dynamic air movement.

Varieties of Nabulsi Soap There are four kinds of Nabulsi soap. Although from the same production process they differ in shape, colour, and use.

— White soap is made from pure olive oil and is taken from the first pressing of the olives.
— Green soap is coloured by the use of second-pressing olive oil (al-jift).
— Soft soap is made by grinding the fragments left over after the soap is cut.
— Al-Mutayyab is a fragrant soap fashioned out of fragments and offcuts of white soap. Dyes and perfumed oils are added, after which the mixture is kneaded and moulded by hand. circling them many times around the rim of a glass tumbler.

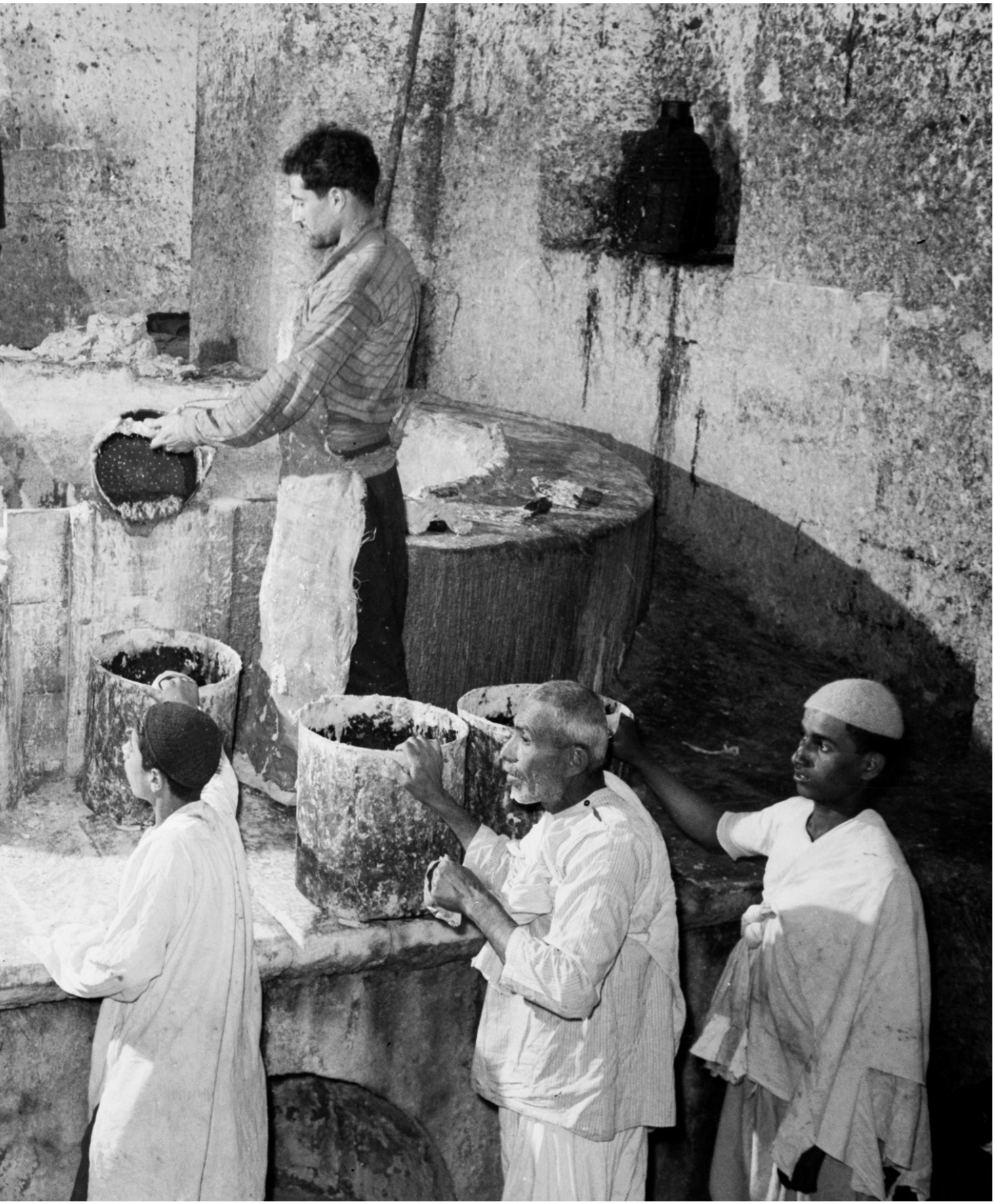
THE AL-MAFRASH
101

AL-HALLAH (the soap boiling pot), AL MA[illegible] and t[illegible] STONE BASINS

for preparing the soap ingredients.

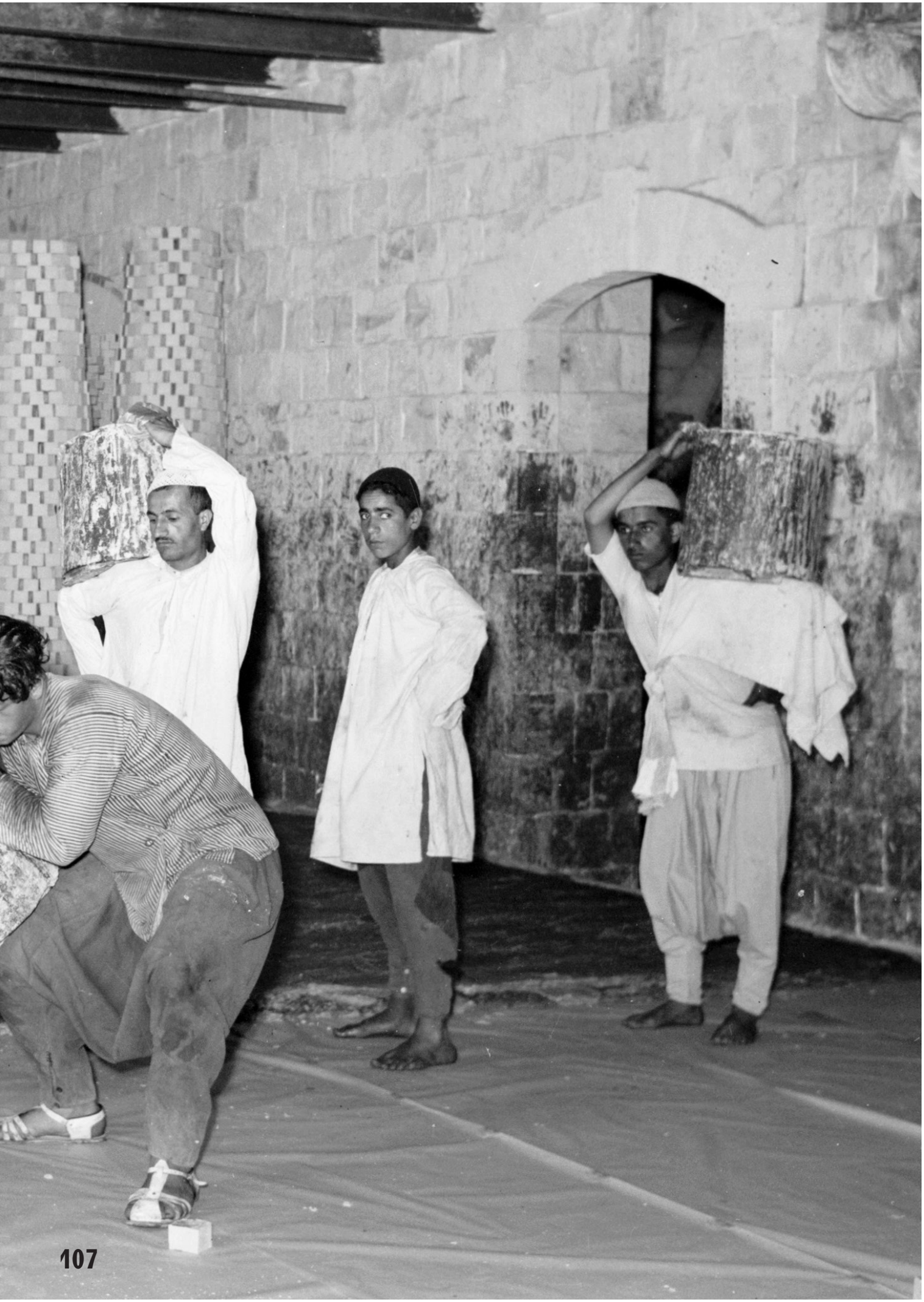
THE CUTTING AND STACKING OF WHITE SOAP

WORKERS LINE UP TO TAKE THE HOT SOAP LIQUID TO THE UPPER FLOOR
104



FROM THE AL-HALLAH, HALLAH (soap boiling pot)
105

LIQUID SOAP POURED OUT TO HARDEN, seen also a worker carrying ash-Shoka (the fork) to measure the thickness of soap mixture and al-Malij to smooth it accordingly. Also soap pillars (tananir) of earlier patch are seen in the background.



THE CUTTING AND STACKING OF WHITE SOAP
108

SOAP STAMPING

SOAP CUTTING

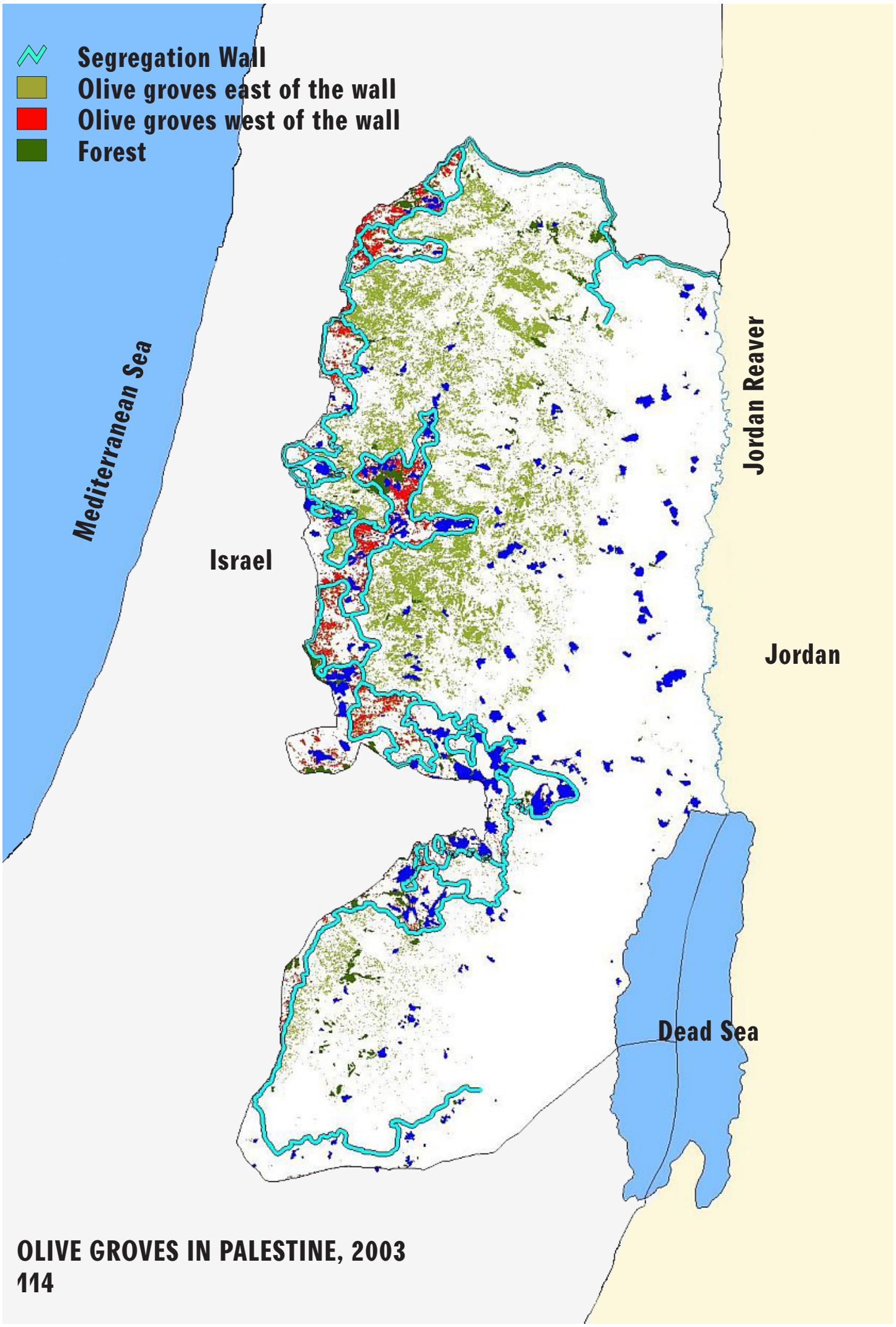
STAMPING AND CUTTING GESTURES ON SOAP FLOOR BEFORE INDIVIDUAL

REMOVAL
110

OLIVE TREES

During seminar week we will tour the local olive trees, which sit sporadically throughout the city of Nablus and its surrounding areas. Olive trees are strongly tied to traditional Palestinian farming life, with generations of families gathering together to harvest the olives from mid-September for two months.
After the olives are handpicked from the trees, the farmer empties their sack of olives into a large container that transfers the olives onto a conveyor belt for washing, separating and crushing. The solid remains of olives, or the pomace, are separated and placed into a container. The machine then separates the olive oil from the wastewater using an automated olive press.

A VERY OLD OLIVE TREE IN NABLUS
113



OLIVE GROVES IN PALESTINE, 2003

HERITAGE OF OLIVE OIL PRODUCTION

Excerpt from essay: INTRODUCING OLIVE CULTURE IN PALESTINE, Maissoun Sharkawi, Ph. D in History from the University of Lorraine-Nancy, 2019

The names of many Palestinian villages are associated with olive culture and either related to the cultivation of the tree or to the extraction of its oil. Two villages in the Nablus area, one in the north and the other in the south, are named Asira, which is derived from the word pressing and relates to olives. The name of the village Zeita, which is located near Nablus, is derived from oil. Ein al-Zeitūn (a now depopulated village north of Safad inside the Green Line area) means the fountain of olives; Birzeit, located to the north of Ramallah, means the well of oil; and Silūn, located between Ramallah and Nablus, means the flow of oil. Furthermore, many villages and towns in Palestine are established on the ruins of older sites known as khirab (sing. khirba) that often contain ancient remains of olive oil extraction installations, villages and towns such as Jifna, near Ramallah, and ad-Dahiriyya and Dura, in the Hebron area, stand as good examples.

The olive tree, shajarat al-zaytūn, and its oil, zeit al-zaytūn, have been symbolic to Mediterranean societies for centuries as the most important zones of olive cultivation are situated around the Mediterranean Basin. The olive tree has prospered throughout history, growing mainly in the mountainous areas of this region, where it flourishes due to the breeze of the sea that is accompanied by a moderate climate.

Olive oil can be regarded as the petroleum of antiquity. Its production is among the oldest and most important trade industries. In Palestine, archaeological evidence shows that olive oil production started in the Neolithic Period (8300 to 4500 BCE) and continued until the oleo-culture sector was mechanized by the introduction of semi-mechanical machines, notably the manualiron-screw press in the middle of the 19th century. Therefore, the rural zones of the Mediterranean with their agricultural social structure and unique climatic environment have allowed the development of olive cultivation.

Palestinian olive trees, as described by Dalman, are evergreen trees that always appear in groups and bear the sign of proximity to a village or a monastery. The most important area of this culture spreads throughout the northern mountainous area of historic Palestine, from Akre to Safad, and is prominent particularly in the village of Rameh, which is known as the Queen of Oil, malaket ezzeit. Here, an old olive tree of 5 meters height with a trunk diameter of 12 metres was observed. In the central area, olive trees mostly grow on land that belongs to the villages located in the Nablus mountains (Jabal Nables), the Jerusalem Wilderness (Jabal al-Quds), and the mountains around Hebron (Jabal al-Khalil), and they flourish at altitudes up to 1000 metres. They retain the soil during the torrential winter rains that are typical

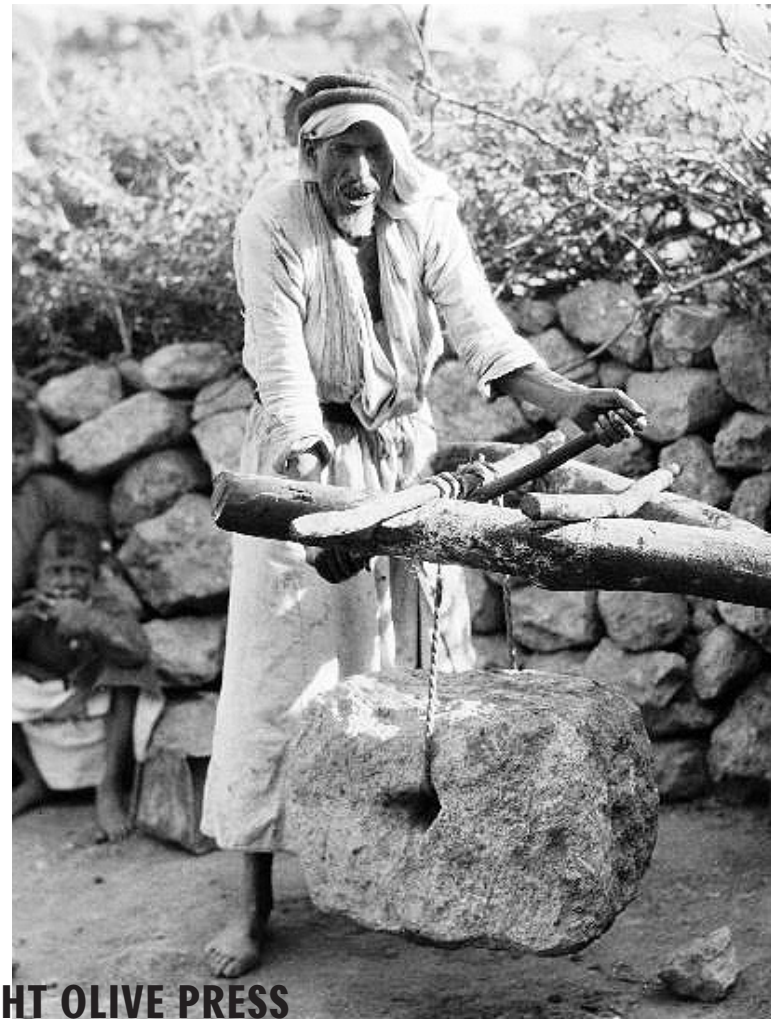
for this region and protect the soil during the long dry Mediterranean summer droughts. Palestinian olive trees prefer the harsh rocky limestone soils and climatic conditions found in Palestine's central mountain areas. In many villages, olives are named according to the type of stone that composes the land.

According to botanical remains, specialists confirm that the origin of olive culture occurred in the Levant, mainly in the geographical area of modern Syria. Yet, recent research has shown that the tree appeared earlier in the valley Teleilat Ghassoul, located in today's Jordan, mainly in its eastern area, close to the Dead Sea. Archaeological evidence shows that the commercial development of olive oil was practiced in the Levant as early as the Bronze Age (3150–2200 BCE) and continued during the Iron Age (1200–537 BCE). Later on, the Phoenicians introduced the olive culture in their settlements throughout the western Mediterranean region, Northern Africa, Sardinia, and Spain, and the tree reached Italy and France through the Greeks. Historically, as documented by archaeological remains, the area of historic Palestine constituted the largest industrial olive oil production centre in the region. It dates back to the 7th century Iron Age.

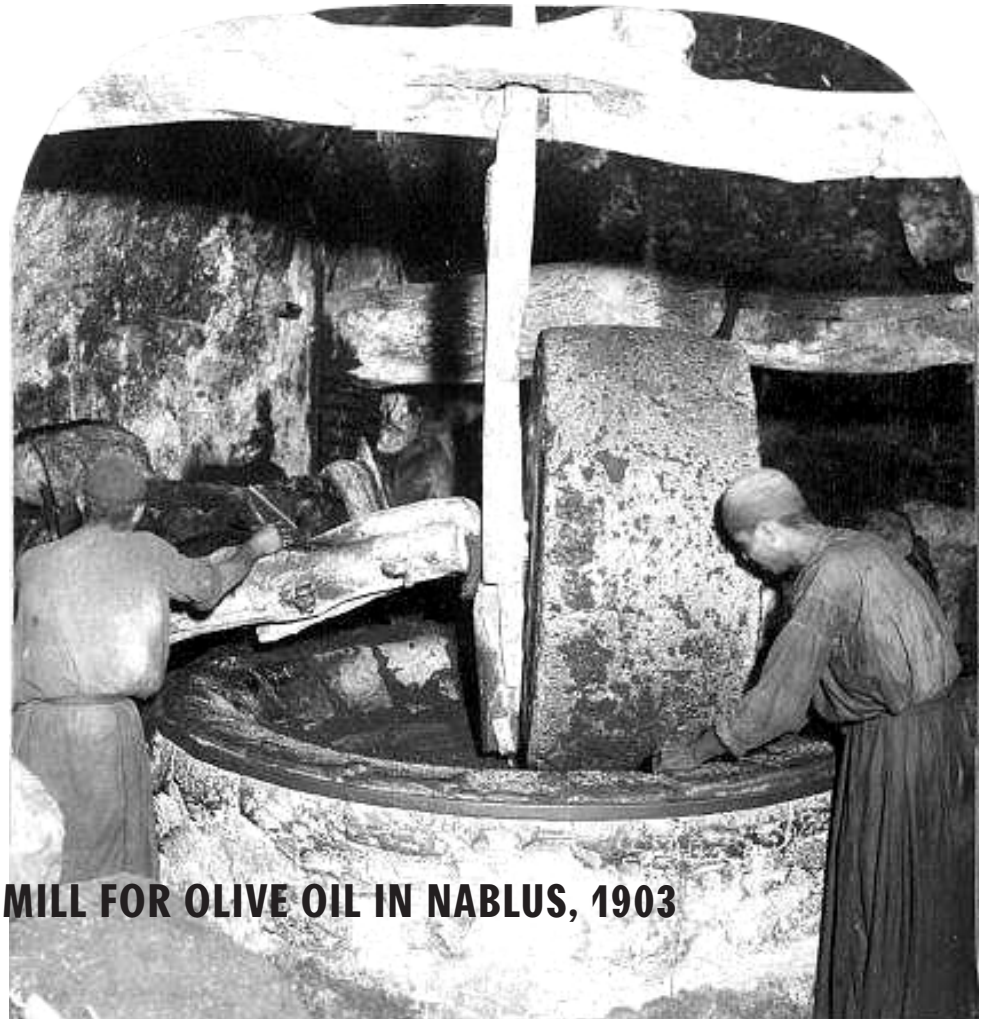
OLIVE TREES DURING OLIVE HARVEST, PALESTINE, 1880–1920
118

PALESTINIANS CRUSHING OLIVES TO MAKE OLIVE OIL DURING THE HARVEST

MONTHS IN PALESTINE, CIRCA 1900–1920
119



LEVER AND WEIGHT OLIVE PRESS

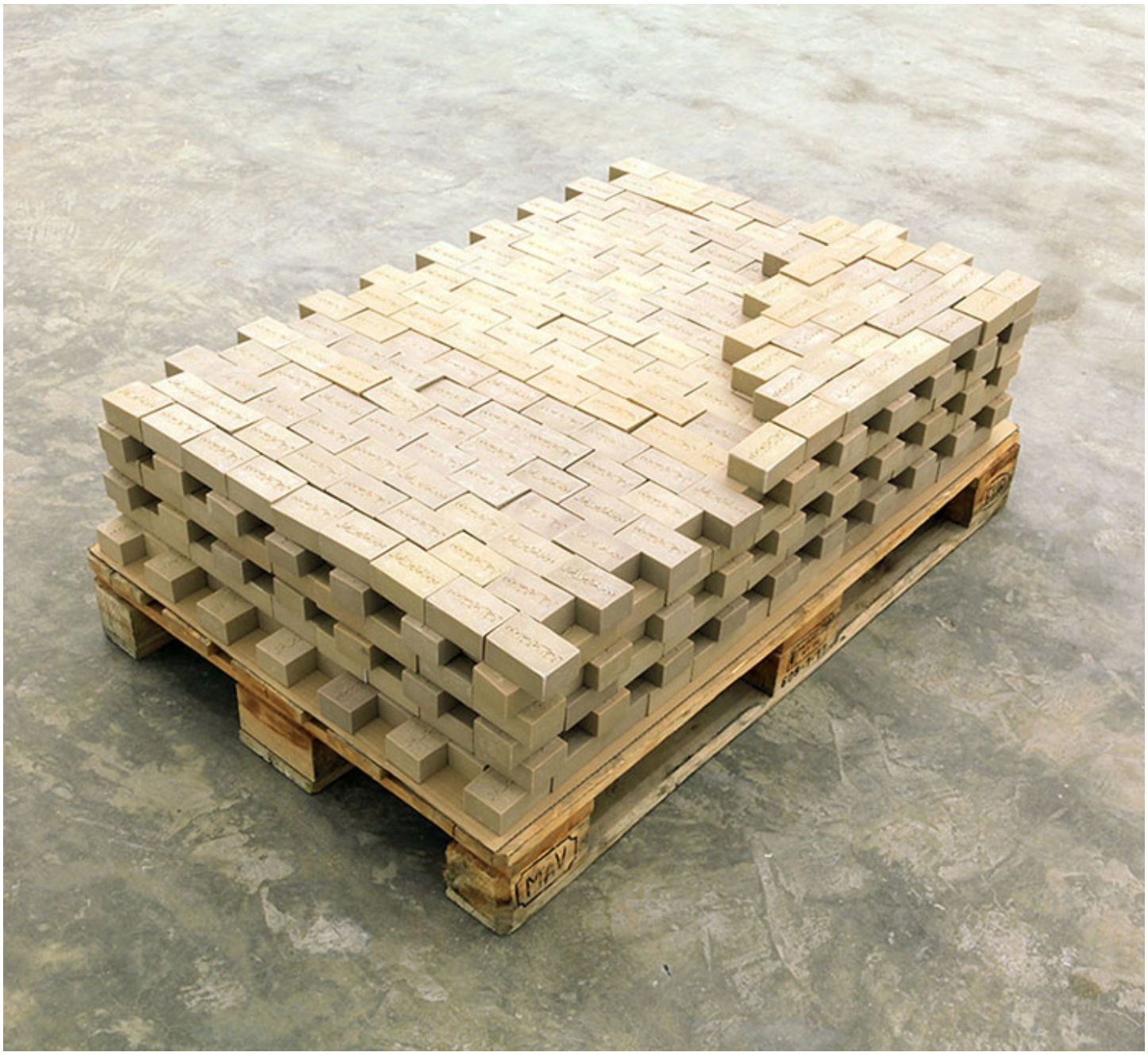


CRUSHING MILL FOR OLIVE OIL IN NABLUS, 1903

AL-MANATEER: a one room stone structure built without binding materials, used for guarding the fields, for farmers to rest in, and to temporarily store the harvested olives

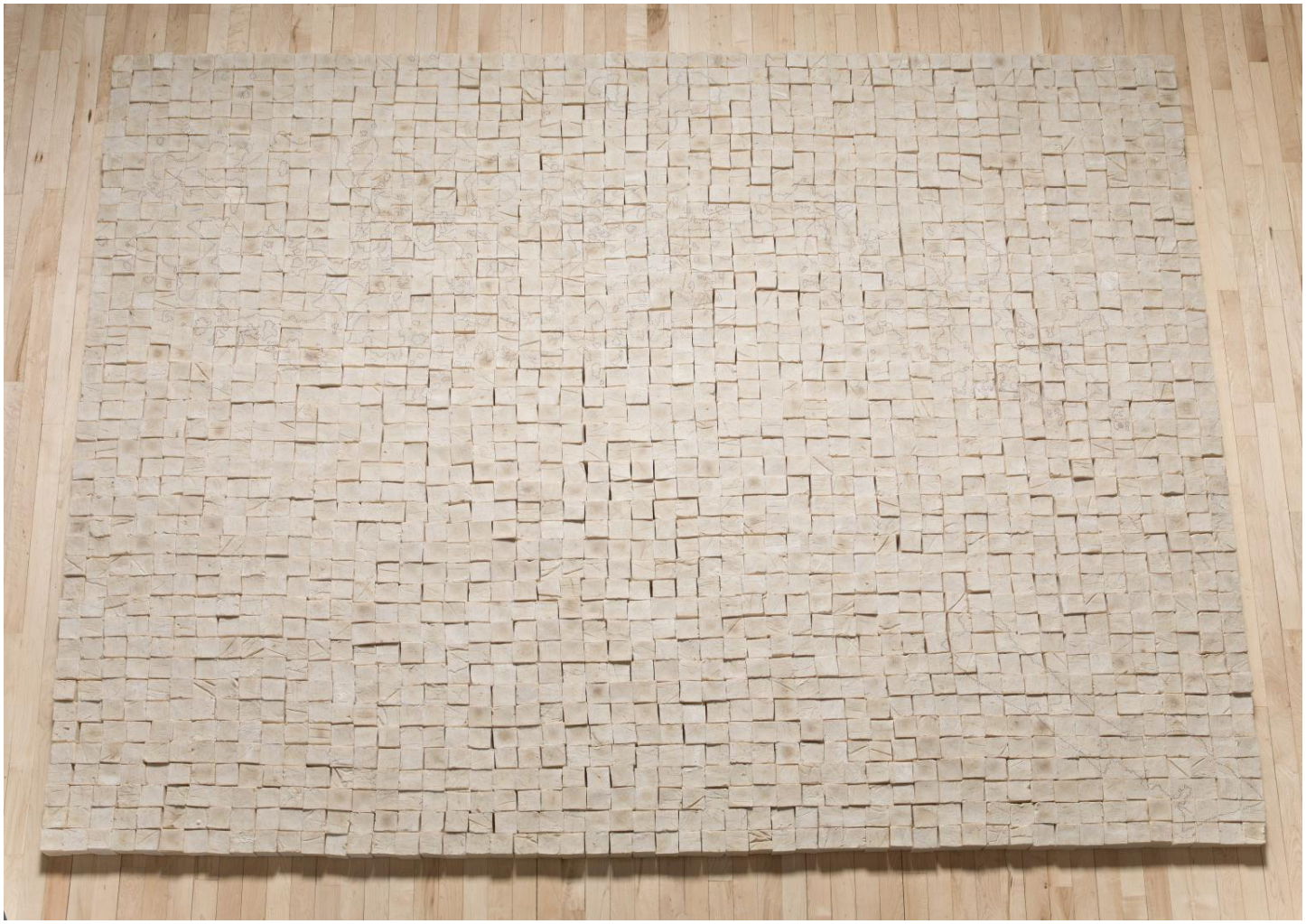
RETAINING WALLS ON HILL SLOPES

RELEVANT WORKS



Taysir Batniji, NO CONDITION IS PERMANENT, 2014
124

In 2007, Taysir Batniji was invited by the Swiss artist and commissioner Rayelle Niemann to attend a workshop in Amman entitled NO CONDITION IS PERMANENT, that he could not reach because of contretemps...
In 2014 he responded to the content of this workshop, realising an ephemeral sculpture, composed of many of soap bars, piled up on a wooden pallet, isolated in the middle of a room. The Arabic saying Dawam el Hal Men Al Mohal, which means 'No condition is permanent' is engraved on each bar, with a stamp specially made for the installation.
In Arab countries, this sentence is used when people are confronted with painful situations, like the loss of a person. The adage brings comfort and hope in difficult moments by carrying the idea that pain will not last. But, in fact, this hopeful sentence carries its own contradiction, emphasising the weight of relativity on human conscience.
Contrary to a message engraved on stone, one stamped on a bar of soap is doomed to vanish with time and use.



Mona Hatoum, Present Tense, 1996
126

Present Tense 1996 is a floor-level sculpture made up of 2,200 square blocks of Nablus soap into which Hatoum has pressed tiny red beads. These create what initially looks like an abstract arrangement but is in fact an outline map of the Middle East. The beads delineate the map drawn up at the Oslo Peace Agreement of 1993 between Palestinian and Israeli authorities, to demarcate land to be 'returned' to Palestine. Made of pure olive oil, the soap is a traditional Palestinian product. This major industry originated in the city of Nablus in the tenth century and has continued to this day. Dotting this layer of creamy and semi-transparent soaps, Hatoum's cartography highlights the ephemeral state of recent territorial re-mapping, while on the other hand reflecting the persistent and lasting history of the Palestinian people.

STONE

ELIAS AND YOUSEF ANASTAS

We (Elias and Yousef) are partners at AAU ANASTAS architects, co-founders of LocalIndustries, co-founders of Radio alHara and co-founders of The Wonder Cabinet. The studio focuses on tying links between crafts and architecture at scales that vary from furniture design to territorial explorations. The studio has been advocating for a contemporary use of structural stone in architecture in Palestine and elsewhere. We have been particularly interested in the politics of stone use for low carbon footprint structures, more resilient cities and more responsible quarries' exploitation. We have co-founded Radio alHara, a community based online radio that weaves unconventional nets of solidarities through sonic experiences. Linking hyper contextual conditions to create a new strengthened global critical discourse that has been at the intersection of all of our practices. Most recently we have launched the Wonder Cabinet, a space-based initiative in Bethlehem for cultural productions that gathers a community of artisans and artists, technical and artistic realms in the aim of producing a culture of global provincialism.

WONDER CABINET

Production-driven cultural space in Bethlehem, Palestine.
We build bridges between Palestineand the world by organising experimental research and production initiatives with local and international partners, developing and proposing unexplored approaches to artistic and cultural production.
We curate and organise residencies and cultural exchanges, encouraging cross-disciplinary research and cooperation across the visual, performative and sound arts, crafts and design, architecture and urban planning, welcoming all realms of creative and cultural expression.
In our production facility and studios, we make available tools, machinery, and expertise for the production of artefacts, prototypes and design products, art pieces and installations, encouraging innovation with materials and production processes. We curate, produce and distribute in-house collections, artworks, products and publishing projects, design and production services, bringing the artists, artisans, designers and professionals of our community under the same hat.

STONE MATTERS

Stone matters is an experimentations-based research into the potential for including structural stone in the language of contemporary architecture, and for combining traditional craftsmanship and materials with innovative construction techniques.
First born as a reaction to a systematic misuse of clad stone in Palestine, the project takes its cue from the historic reoccurrence of stone-made architectural elements found in Palestine. The architecture of Palestine combines disparate architectural elements brought by various civilisations from abroad with local elements found in situ[1]. Through time, certain architectural attributes, originally found locally, returned to Palestine as imported architectural elements. In an attempt to blur the limits between local and global architecture, Stone Matters puts forward the relevance of the research beyond space and time. To this day, Stone matters formalises into a series of site-specific real-scale experimentations (a vault, a lintel, a slab, a wall), academic articles, and a soon-to-be-launched community-based worldwide atlas of elements of architecture made out of stone.
In 2017, Stone Matters took on a wider international dimension with the Victoria and Albert Museum (V&A museum) commission While We Wait (WWW) exhibited during the London Design Festival.
Beyond the designed innovative

construction principle based on ruled surfaces stereotomy[2], WWW is a project about the cultural claim over nature in Palestine. Through stone experimentations, Stone Matters is constantly nourished by site-specific conditions at different scales: territorial limitations, natural and urban environments, and historical contexts.
Embodying the series of experimentations and in continuity with WWW, the latest project of Stone matters is Analogy. It addresses the reoccurrence of stone-made forms and spatial configurations in Palestine through time. While proper to the constitution of the Palestinian city's urban fabric, they are archetypal forms of geometry, and spatial devices found throughout the history and distribution of architecture. Analogy explores the inherent qualities of architectural fundamental elements (including vaults, lintels, and columns) towards finding novel ways of expressing each. It deliberately desacralizes the use of stone, too often associated exclusively with noble constructions, towards creating a vocabulary of stone used in contemporary architecture. Analogy is also meant to be fed by an academic year-long student seminar, which would transform, in a second stage, into a master's program.

1) Deschamps, Paul, et al. Terre sainte romane. Zodiaque, 1990.
2) Ways of cutting elements of stones in order to assemble them in a larger configuration.

STONE MATTERS retrospective at the House of Architectural Heritage

in Bahrain

AMOUD

Aau Anastas, 2019

Amoud is made out of collected stone architectural ruins. The different stone elements come from different periods and illustrate different techniques of construction. It addresses the question of the possibilities of reusing stone as a structural material as well as the finite resource that it embodies and its consequent effect on the natural landscape. On a more global note, the approach seeks to integrate salvaged building components into contemporary architecture.
The collected stones have been geometrically analyzed and interfaces based on stereotomy research allowed to create a self-standing massive stone column. Under the actual state of the research, this research focuses on the re-use of stone elements and their adaptations to new forms and configurations as structural elements of architecture.

ALL-PURPOSE

Aau Anastas, 2021

All-purpose focuses on differences and similarities, analogies that bring together cultures through architecture and highlighting their non-hierarchical yet intricate

AMOUD, Amman Design Week, 2019

dependencies. It challenges established relations of knowledge supremacies in order to imagine new possible ways of living together. The exhibition presents a new form of architecture that stems both from Palestine and from the world and investigates material explorations and architectural living spaces.
All-Purpose, is an installation on the state of stone in contemporary architecture in Palestine.
While the change in the use of the material is largely linked to global transformations in the construction world, the exhibition is meant to present the evolution of the material in relation to contextual political, urban, and cultural realms. The intersections of global and local events is used as a way to better understand the present state of stone in Palestine as well as place its future in a global discourse on the use of the material in contemporary architecture.
The title of the exhibition All-Purpose refers to a known expression used for construction materials and/ or products that are used for more than a single purpose as well as to the systematic consumption of stone in Palestine as a physical and symbolic matter serving multi-layered agendas. The exhibition will tie links between different scales, periods, and locations in Palestine and beyond as a way of blending approaches and placing the use of stone in contemporary architecture at the intersection of local and global matters. In the disparate architectural context of Palestine, certain architectural attributes, originally found locally, returned to Palestine as imported elements. The exhibition challenges the common approach of imperial transmission of knowledge. Instead, it traces architectural elements and techniques beyond borders and historical periods.
All-Purpose builds up its content on Stone Matters, a six-year-long experimentations-based research that formalises into a series of site-specific stone structures in Palestine.

ANALOGY

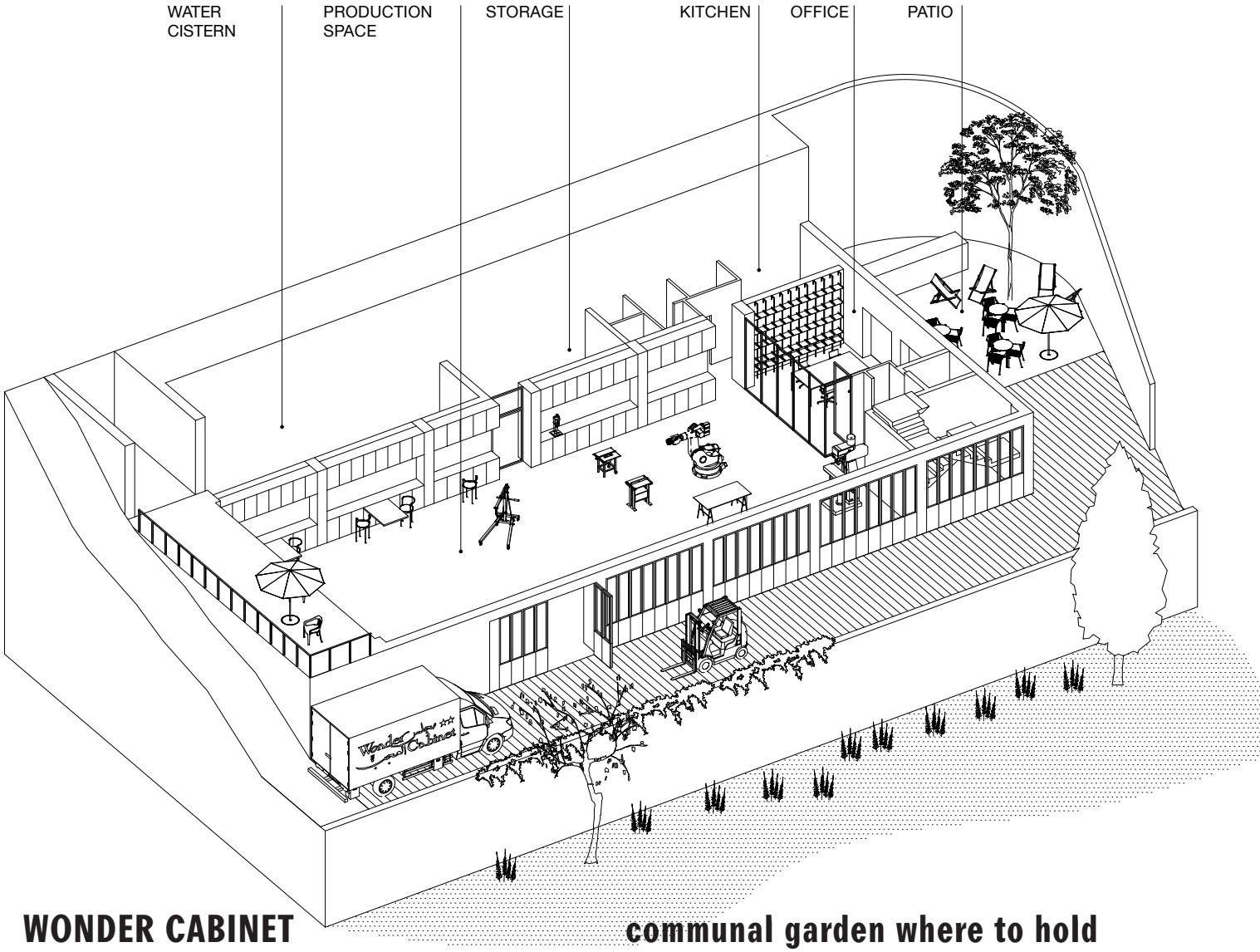
Aau Anastas, 2018

Analogy addresses the reoccurrence of stone-made forms and spatial configurations in Jerusalem through time. Analogy explores the inherent qualities of architectural fundamental elements (including vaults, lintels, and columns) towards finding novel ways of expressing each.
The first experiment of Analogy revealed during the Jerusalem art Biennial, presents a vault inspired by a typology used in Islamic architecture at least since the thirteenth century (Mamluks) and continuously employed – in different

ALL PURPOSE, Venice Architecture Biennale 2021

specific configurations – in the palaces of the Renaissance, as well as in common houses during the Ottoman period. This 'aqd takaneh usually rises on four walls and covers a rectangular (as opposed to square) space.
The focus for the Biennale on the 'aqd takaneh – widespread in domestic Palestinian architecture during the Ottoman period – deliberately desacralises the use of stone, too often associated exclusively with noble constructions. Towards creating a vocabulary of stone use in contemporary architecture, we propose an architectural language both adapted to modern programmatic needs and integrated into a common architectural lexicon.
The 'aqd takaneh presented in the Lutheran school in Jerusalem consists of stone voussoirs that reciprocally hold each other relying on stereotomy, inspired by several lintels and vaults found in Jerusalem. The undulating geometry is defined by shifting sinusoid-shaped profiles forming doubly-curved, ruled surfaces of interfaces between stones allowing for structural reciprocity.

Bottom view, ANALOGY, Jerusalem show IX, 2018

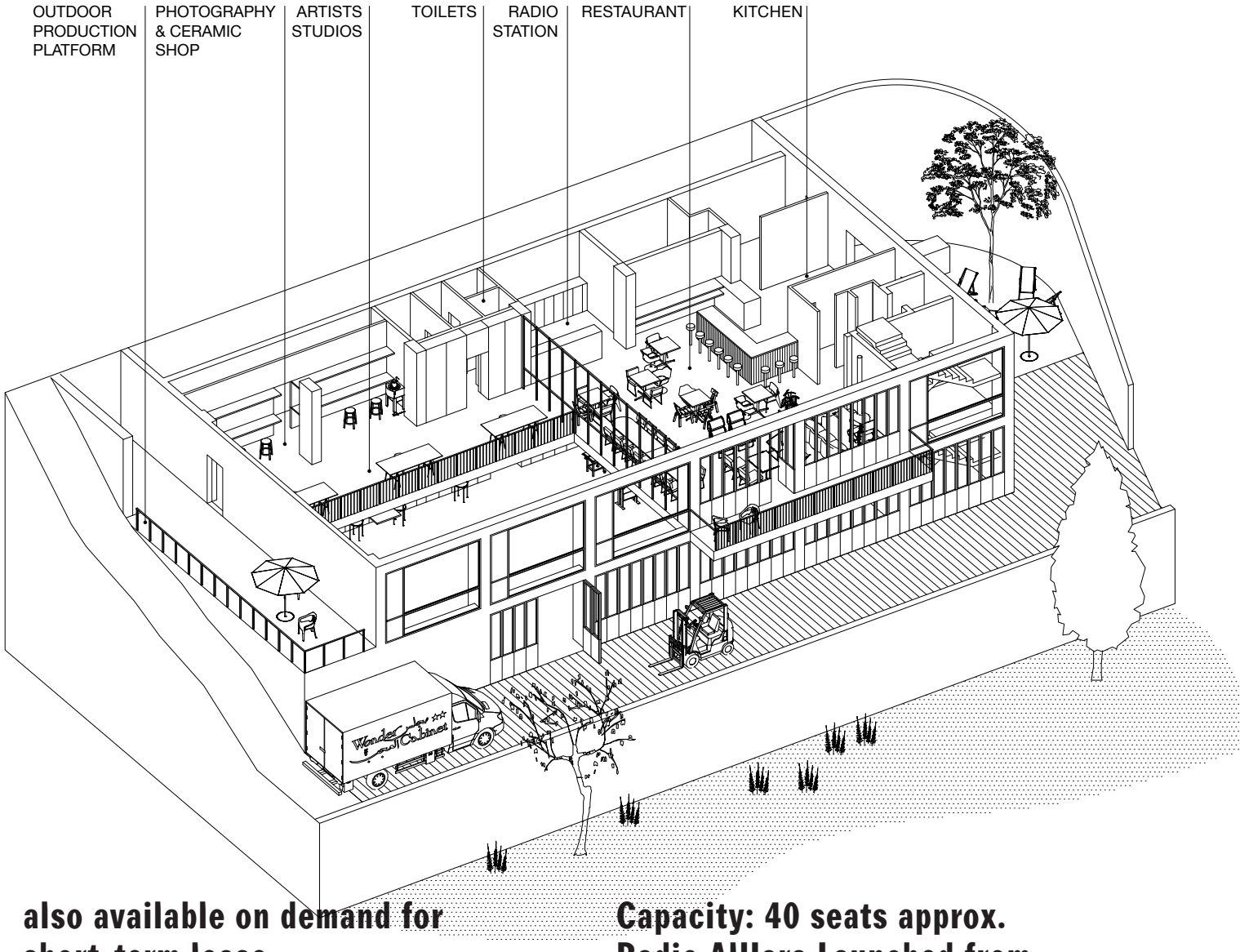


WONDER CABINET

Production Facility Tools and machinery for wood and metal-working; moulding and casting; digital and electronic equipment; printing; textile; photography. Space includes office spaces for the Wonder Cabinet team; a patio, a kitchen and services.

Patio A free, informal and lively communal garden where to hold meetings, work, or simply show up to enjoy a drink, listen to music, relax and meet people.

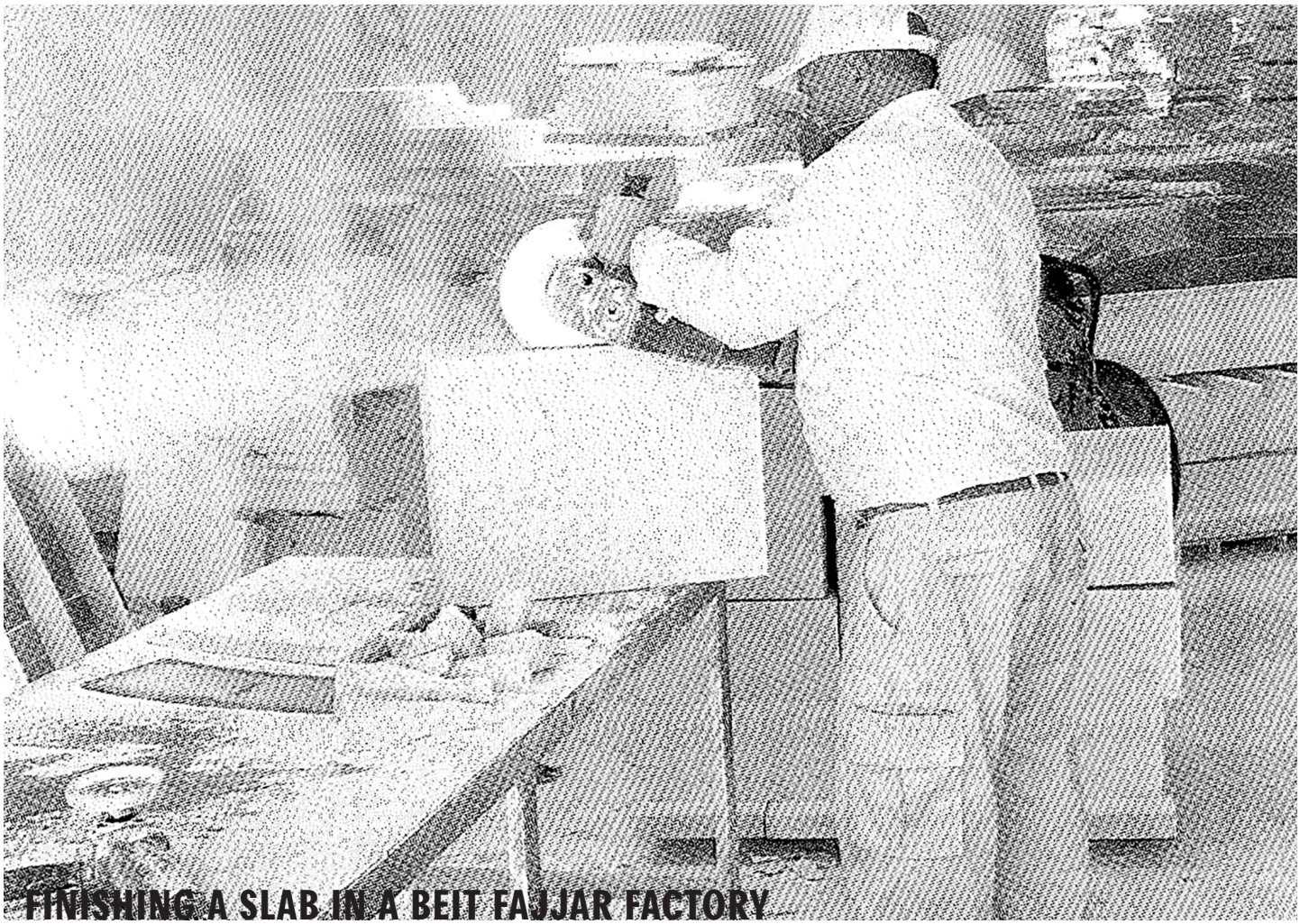
Artist Studios Home to our residents participating in research and production programmes. Flexible space equipped with 3 working stations and storage, they are



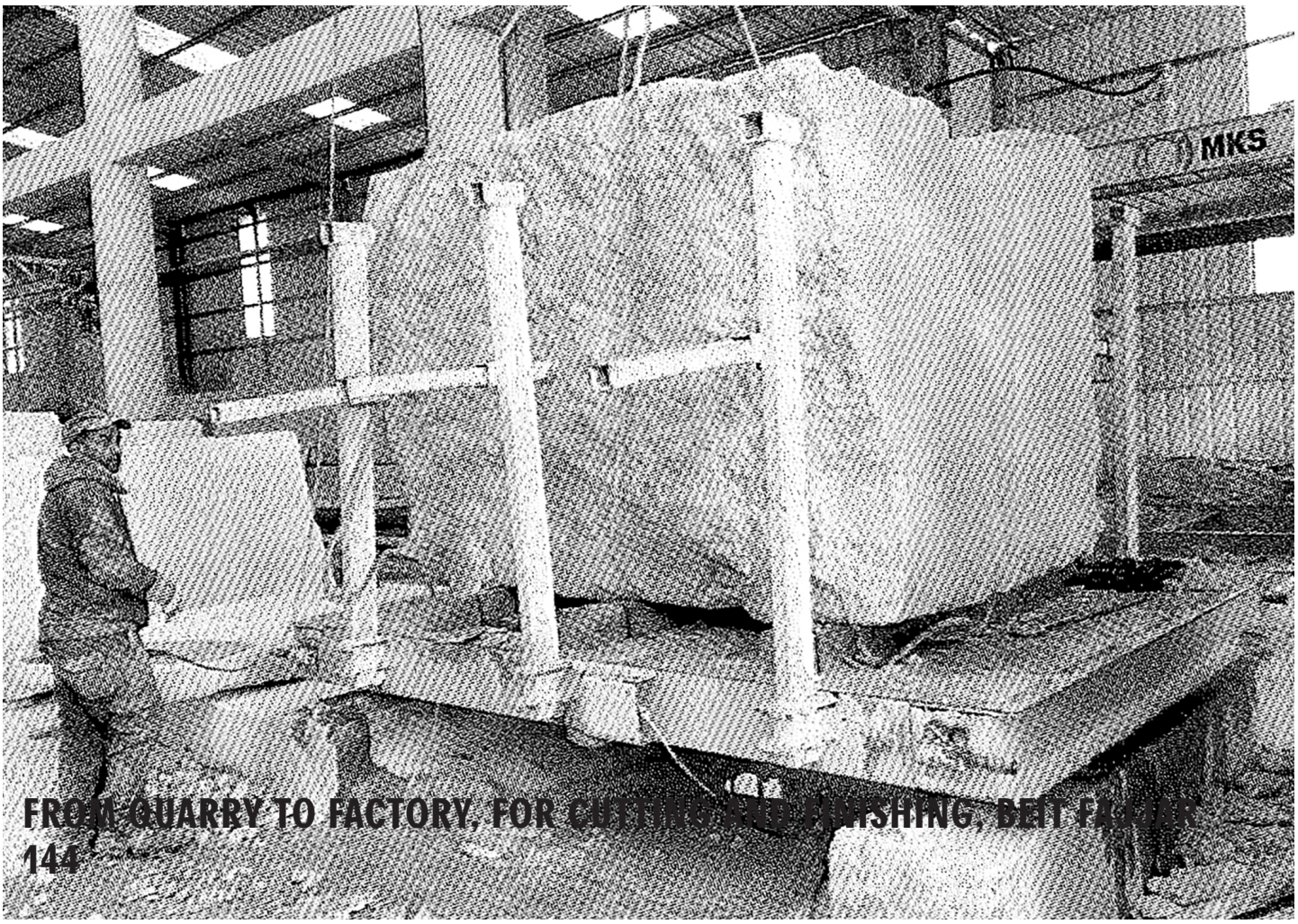
also available on demand for short-term lease.
Restaurant The restaurant, taken over by rotating chefs-in-residency, serves our community, visitors and guests, and is the stage for our social and culinary events. Also available for short-term lease to private events, businnes and organisations.
Capacity: 40 seats approx.
Radio AlHara Launched from Bethlehem in 2020 to encompass the idea of public space, blending the boundaries between producers and listeners across the globe, Radio AlHara finds new home at the Wonder Cabinet as a Booth and gig venue.

BEIT FAJJAR QUARRY

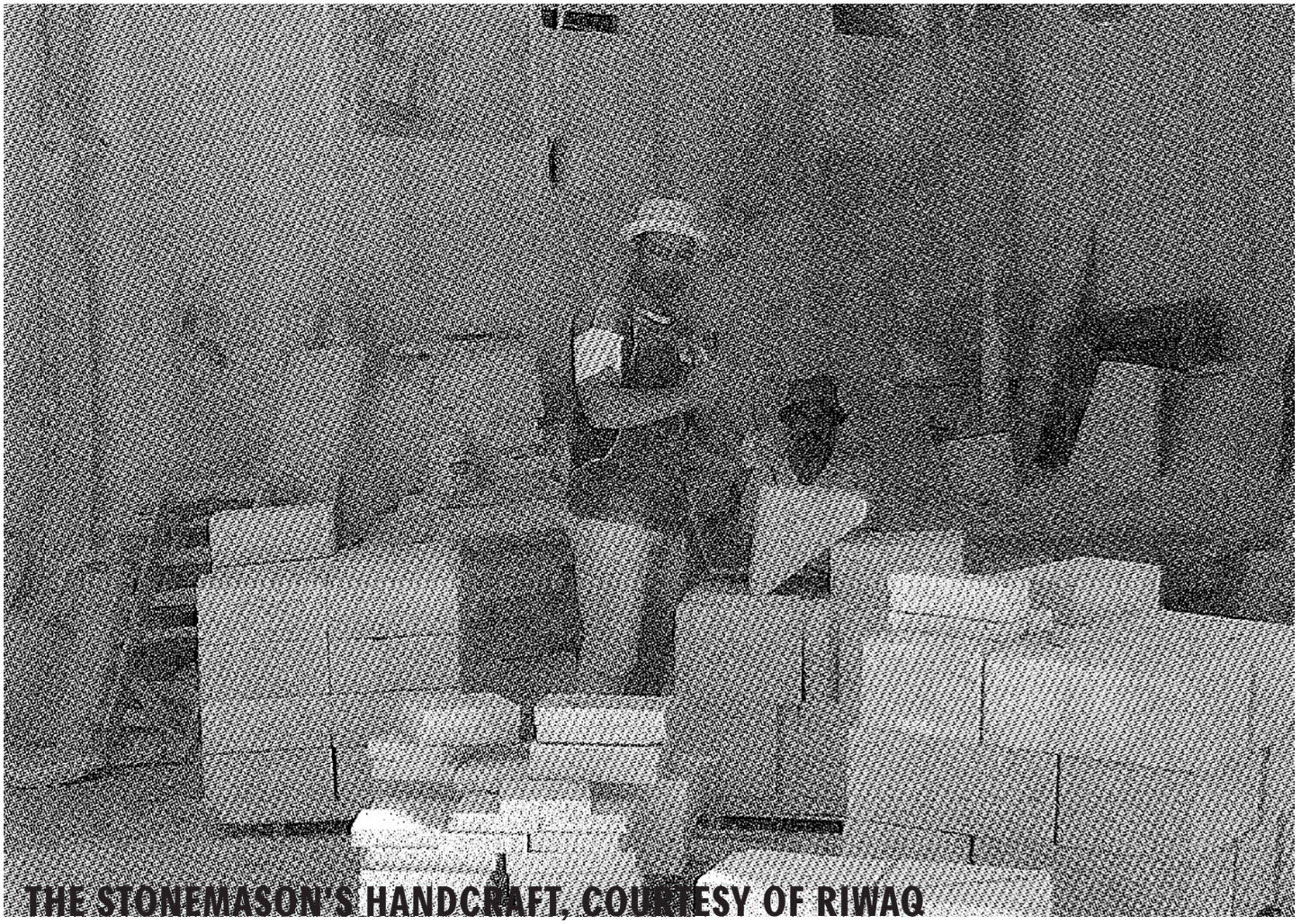
In Palestine, there are two main regions for stone extraction: the region of Heron and Bethlehem and the northern region of Jenin and Nablus.
Stone factories are essentially producing stone for cladding. However, in the last decade, a few factories around Bethlehem introduced advanced fabrication technologies. They target a market essentially based in the gulf and the USA and focused on decorations, corniches, and replicas of Corinthians and flamboyant style elements of architecture.
Nevertheless, these factories are the ones we will be working with as they are able to work with thicker stones and are able to produce special pieces or at least pieces that get out of their line of production.
In fact, one of the advantages of advanced fabrication technologies is that it allows for easier flexibility of diverse production elements.
The extraction method is by using large digging and stone cutting machines. Creating a 'grid' of cuts into the bedrock to then extract the large stone blocks (variable size but roughly 2.4 m×1.6 m×1.5 m).



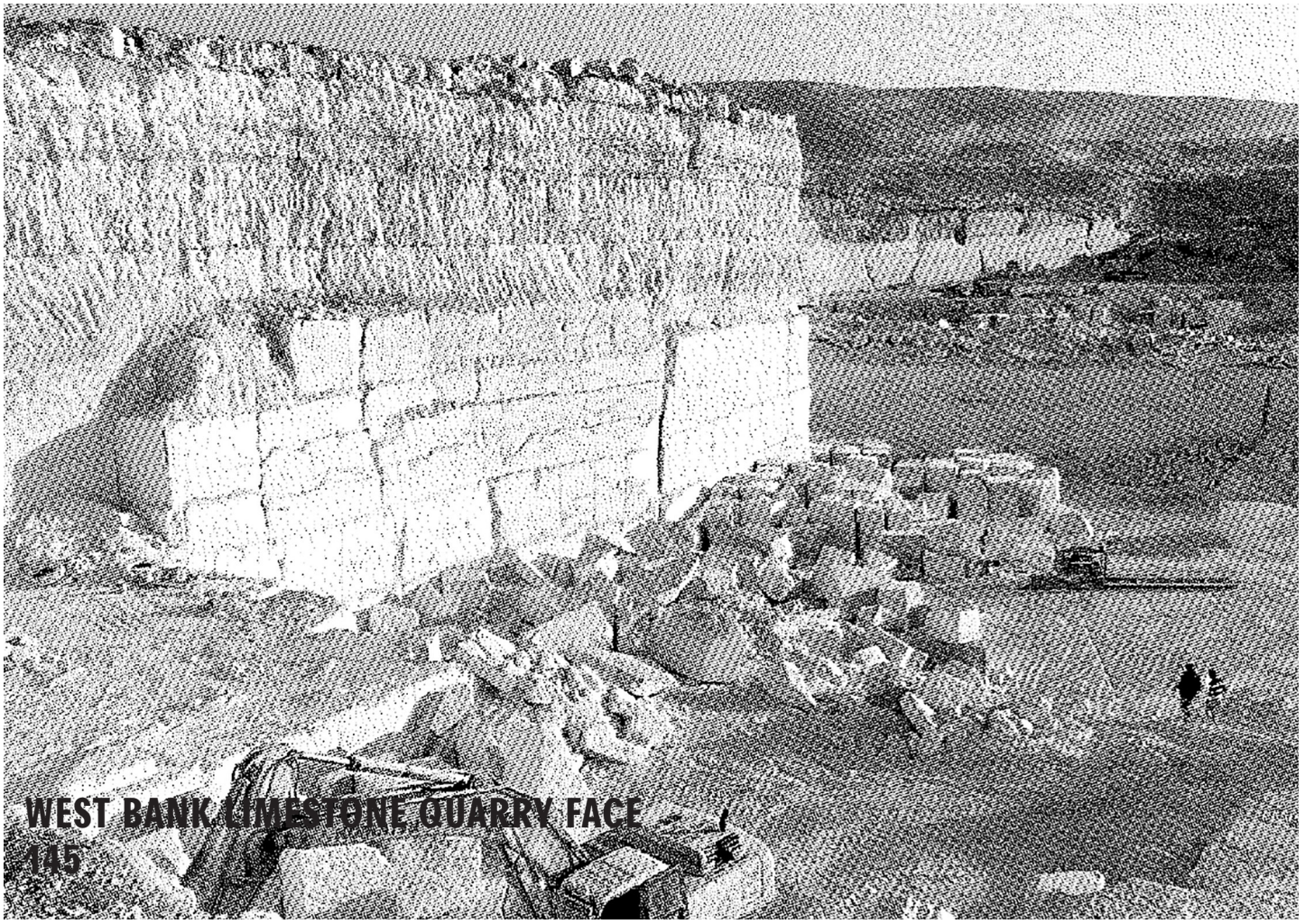
FINISHING A SLAB IN A BEIT FAJJAR FACTORY



FROM QUARRY TO FACTORY, FOR CUTTING AND FINISHING, BEIT FAJJAR

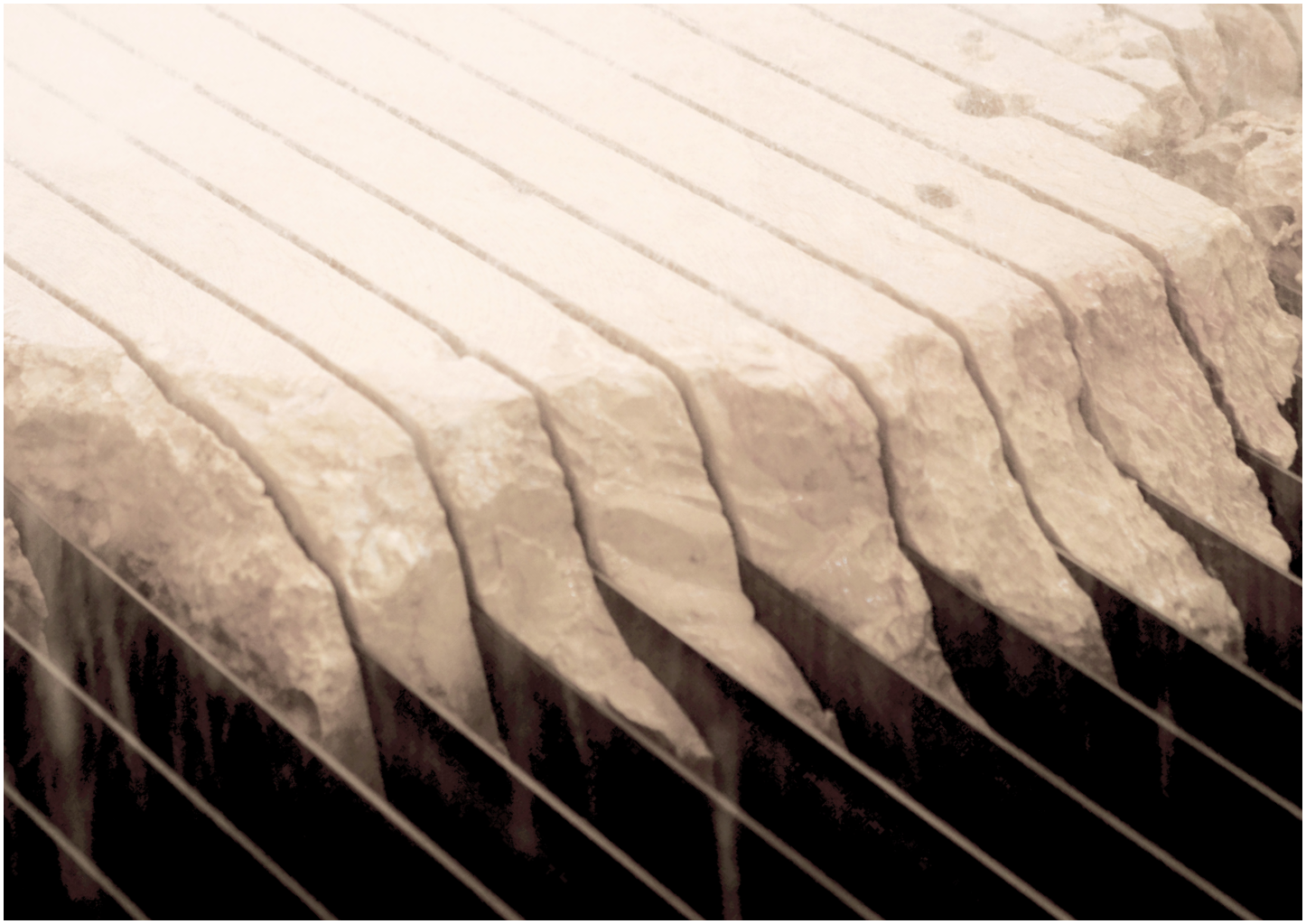


THE STONEMASON'S HANDCRAFT, COURTESY OF RIWAQ



WEST BANK LIMESTONE QUARRY FACE

CUTTING THE WHITE LIMESTONE STONE BLOCKS INTO SLABS



WHITE LIMESTONE
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MECHANICAL PROPERTIES OF WHITE LIMESTONE

We will visit a few quarries in the region of Bethlehem and Hebron and in between. All of the stone available is Limestone with different mechanical properties.

Included in the following pages is the documenation of a stone test with mechanical properties of one of the stones widely used around Palestine. The tests were performed according to the ASTM standards, but with the orientation to the palestinian specifications and classifications.

According to ASTM C 97–09 (Absorption and bulk specific gravity of dimension stone) five cubes were prepared in our laboratory, each with 2"×2"×2' normal sizes.

WATER ABSORPTION

No.	Dimensions (mm)			Volume to surface area	Absorption (%)	ASTM C–568–08 classification
	x	y	z			
1	50	50	50	8.3	0.67	High density
2	50	50	50	8.3	0.47	High density
3	50	50	50	8.3	0.40	High density
4	50	50	50	8.3	0.53	High density
5	50	50	50	8.3	0.65	High density
Average					0.54	High density
Min.					0.40	High density
Max.					0.67	High density

BULK SPECIFIC GRAVITY

No.	Dimensions (mm)			Volume to surface area	Bulk specific gravity	ASTM C–568–08 classification
	x	y	z			
1	50	50	50	8.3	2.631	High density
2	50	50	50	8.3	2.654	High density
3	50	50	50	8.3	2.667	High density
4	50	50	50	8.3	2.647	High density
5	50	50	50	8.3	2.623	High density
Average					2.646	High density
Min.					2.631	High density
Max.					2.667	High density

According to ASTM C 170–09 (compressive strength of diminesion stone). 20 specimens were sawed from samples brought to the laboratory, and finished by grinding to smooth surfaces. The 20 specimens were divided into 4 groups each with five specimens, 2 groups were taken perpendicular to the rift and tested under compression in wet and dry conditions, and the remaining 2 groups were taken parallel to the rift and tested under compression in wet and dry condition.

COMPRESSIVE STRENGTH OF SPECIMENS PERPENDICULAR TO THE RIFT

Condition	No.	Dimensions (mm)			Load (KN)	Compressive strength (Mpa)	ASTM C–568–08 Classification
		x	y	z			
Wet	1	49.0	50.0	49.9	185.5	75.5	High density
	2	50.0	48.8	49.9	227.7	93.3	High density
	3	50.5	49.0	50.5	189.2	76.5	High density
	4	49.2	50.2	50.0	229.5	92.9	High density
	5	49.2	50.2	50.0	210.5	85.2	High density
Average						84.7	High density
Dry	1	49.2	50.2	50.2	328.0	132.8	High density
	2	49.0	49.5	50.0	309.4	127.6	High density
	3	50.0	49.0	49.4	222.5	90.0	High density
	4	50.0	49.0	49.9	284.9	116.3	High density
	5	48.9	49.9	50.0	255.7	104.8	High density
Average						114.5	High density

COMPRESSIVE STRENGTH OF SPECIMENS PARALLEL TO THE RIFT

Condition	No.	Dimensions (mm)			Load(KN)	Compressive strength (Mpa)	ASTM C–568–08 Classification
		x	y	z			
Wet	1	50.0	49.5	50.0	187.5	75.6	High density
	2	49.5	50.0	50.0	205.5	83.0	High density
	3	50.0	50.1	49.3	201.2	80.3	High density
	4	49.5	50.9	50.0	168.9	67.0	High density
	5	50.0	49.2	50.0	209.2	85.0	High density
Average						78.2	High density
Dry	1	49.2	50.5	50.0	207.5	83.5	High density
	2	50.4	49.0	50.2	157.5	63.8	High density
	3	50.2	49.8	49.0	173.7	69.5	High density
	4	50.0	49.2	50.4	203.9	82.5	High density
	5	50.0	50.2	49.3	187.7	74.8	High density
Average						74.8	High density

According to ASTM C 99–09. (Modulus of Rupture od Dimension Stone). 20 Specimens were sawed from samples, and finished by grinding to smooth surfaces, and tested for modulus of rapture.

MODULUS OF RUPTURE OF SPECIMENS PARALLEL TO THE RIFT

Condition	No.	Dimensions (mm)			Load (KN)	Modulus of Rupture (MPa)	ASTM C–568–08 Classification
		length	breadth	depth			
Wet	1	200.0	101.1	61.2	9.79	6.9	High density
	2	200.9	101.7	60.1	5.13	3.7	Medium density
	3	200.0	100.9	61.1	5.83	4.1	Medium density
	4	200.0	101.4	60.1	6.99	5.1	Medium density
	5	200.4	101.6	60.0	5.59	4.1	Medium density
Average						4.8	Medium density
Dry	1	200.1	101.0	60.5	9.79	7.1	High density
	2	200.0	100.5	61.5	11.42	8.0	High density
	3	200.2	101.2	60.0	12.58	9.2	High density
	4	200.0	101.1	61.2	10.25	7.2	High density
	5	200.1	100.4	60.2	11.42	8.4	High density
Average						8.0	High density

MODULUS OF RUPTURE OF SPECIMENS PERPENDICULAR TO THE RIFT

Condition	No.	Dimensions (mm)			Load (KN)	Modulus of Rupture (MPa)	ASTM C–568–08 Classification
		length	breadth	depth			
Wet	1	200.0	100.2	62.4	19.34	13.2	High density
	2	200.1	100.1	62.5	19.11	13.0	High density
	3	200.2	100.4	61.4	17.48	12.3	High density
	4	200.1	100.2	61.8	18.84	11.1	High density
	5	200.0	100.3	62.5	18.64	12.7	High density
Average						12.5	High density
Dry	1	200.0	100.2	63.1	10.40	7.0	High density
	2	200.0	100.0	61.0	17.48	12.5	High density
	3	200.0	100.1	63.0	15.15	10.2	High density
	4	200.2	100.4	64.3	16.08	10.3	High density
	5	200.4	100.1	64.3	11.16	7.2	High density
Average						9.4	High density

The physical requirements of dimension stone according to the ASTM C–568-08 designation

THE PALESTINIAN STANDARD SPECIFICATIONS FOR LIMESTONE BUILDING STONE NO. PS112

Property	Class A High density	Class B Medium density	Class C Low density
Specific gravity (g/m^2) Min	2.560	2.160	1.760
Absorption (%) (by weight) Max.	2.0	4.0	8.0
Modulus of rapture (N/mm^2) Min.	6.9	4.5	3.4
Abrasion Resistance	10	10	10
Unconfined comp. strenght (N/mm^2) Min.	55	45	28

WHITE LIMESTONE QUARRY
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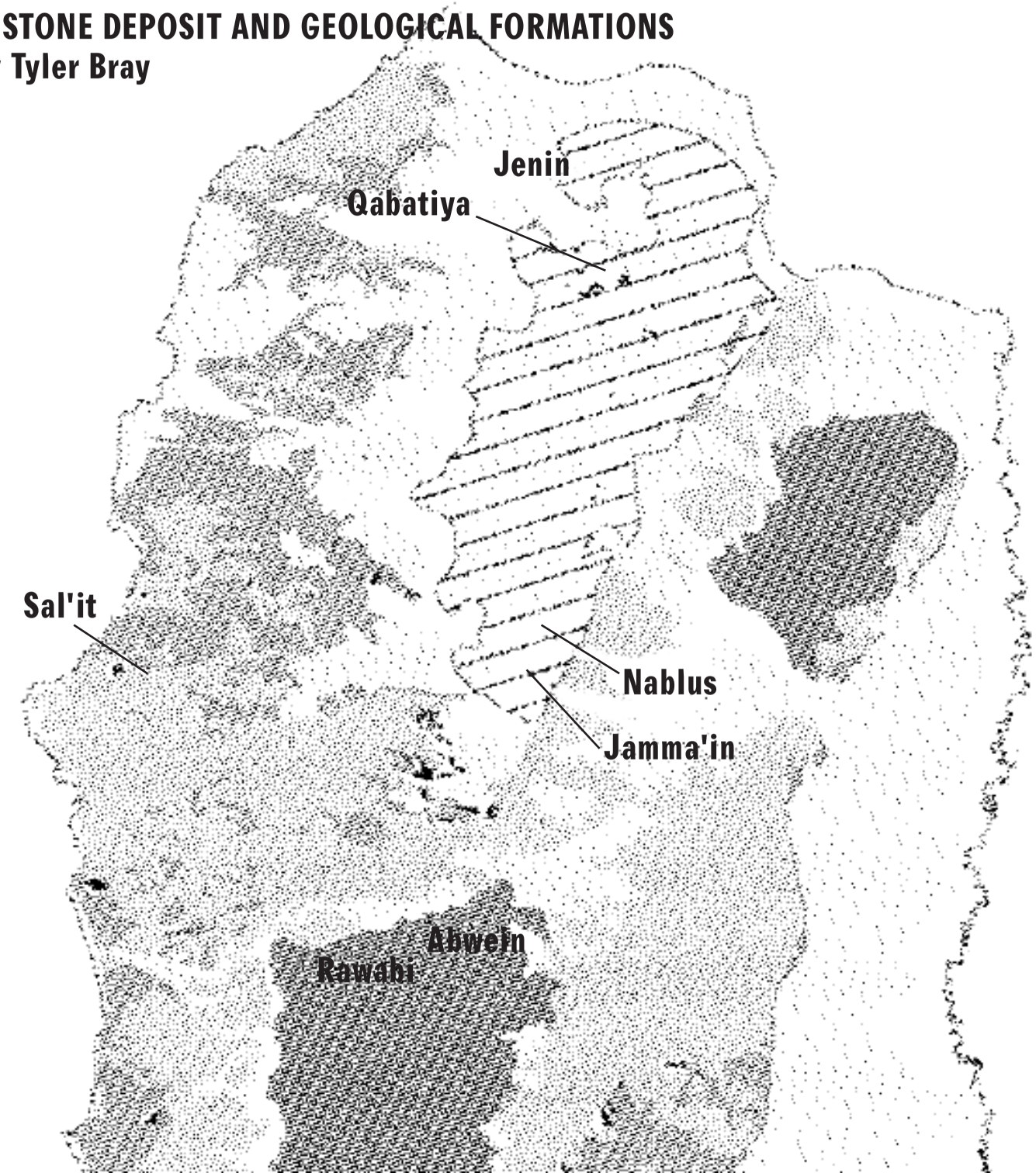
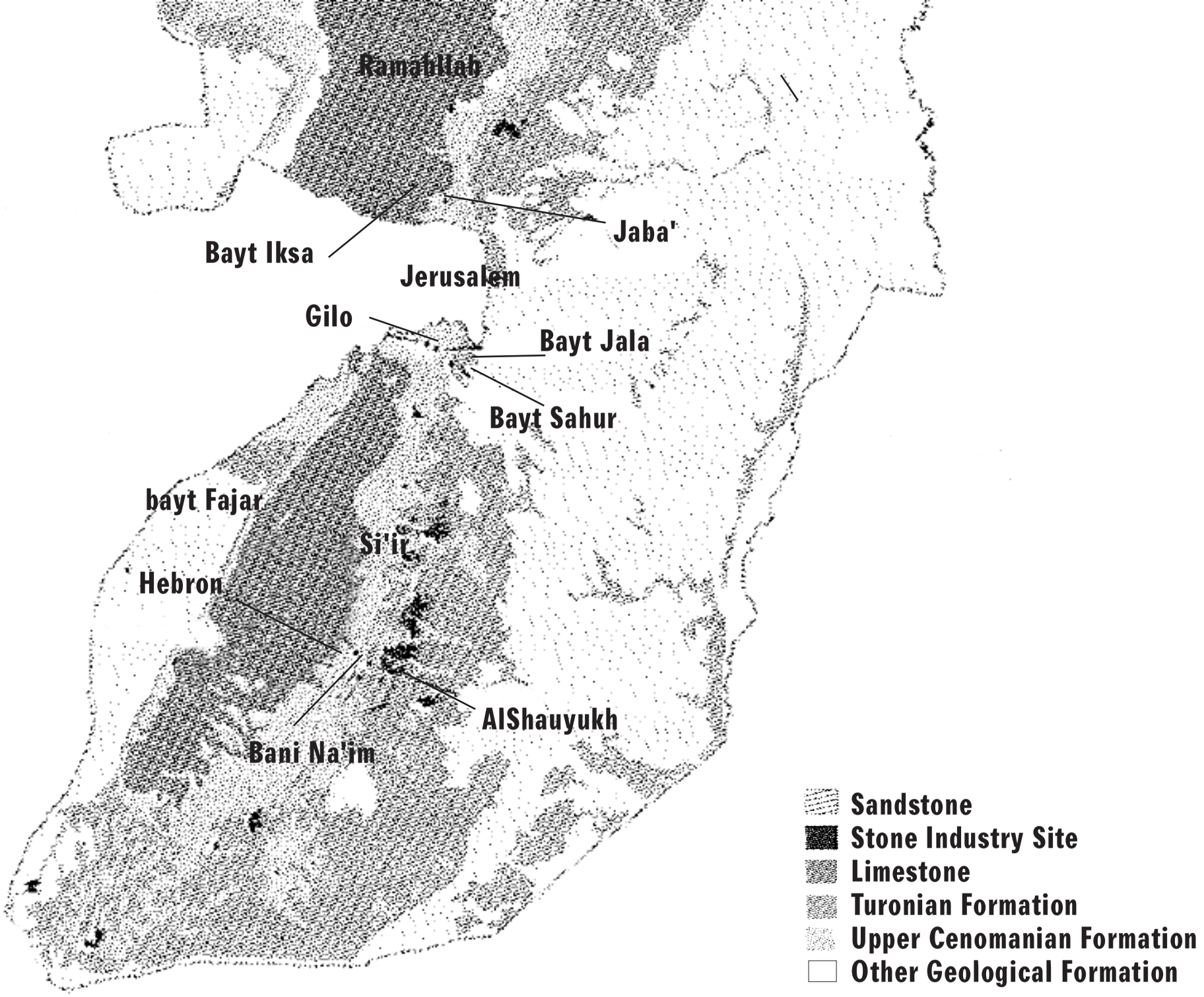
WEST BANK STONE DEPOSIT AND GEOLOGICAL FORMATIONS

Compiled by Tyler Bray




Ramallah
Jaba'
Bayt Iksa
Jerusalem
Gilo
Bayt Jala
Bayt Sahur
bayt Fajar
Si'ir
Hebron
AlShauyukh
Bani Na'im
Sandstone
Stone Industry Site
Limestone
Turonian Formation
Upper Cenomanian Formation
Other Geological Formation

HERITAGE

PALESTINIAN STONE HERITAGE SITES

Photo by the Palestine Exploration Fund, depicting ruins of a synagogue,

Meiron, Palestine, 1898. V & A Collections.
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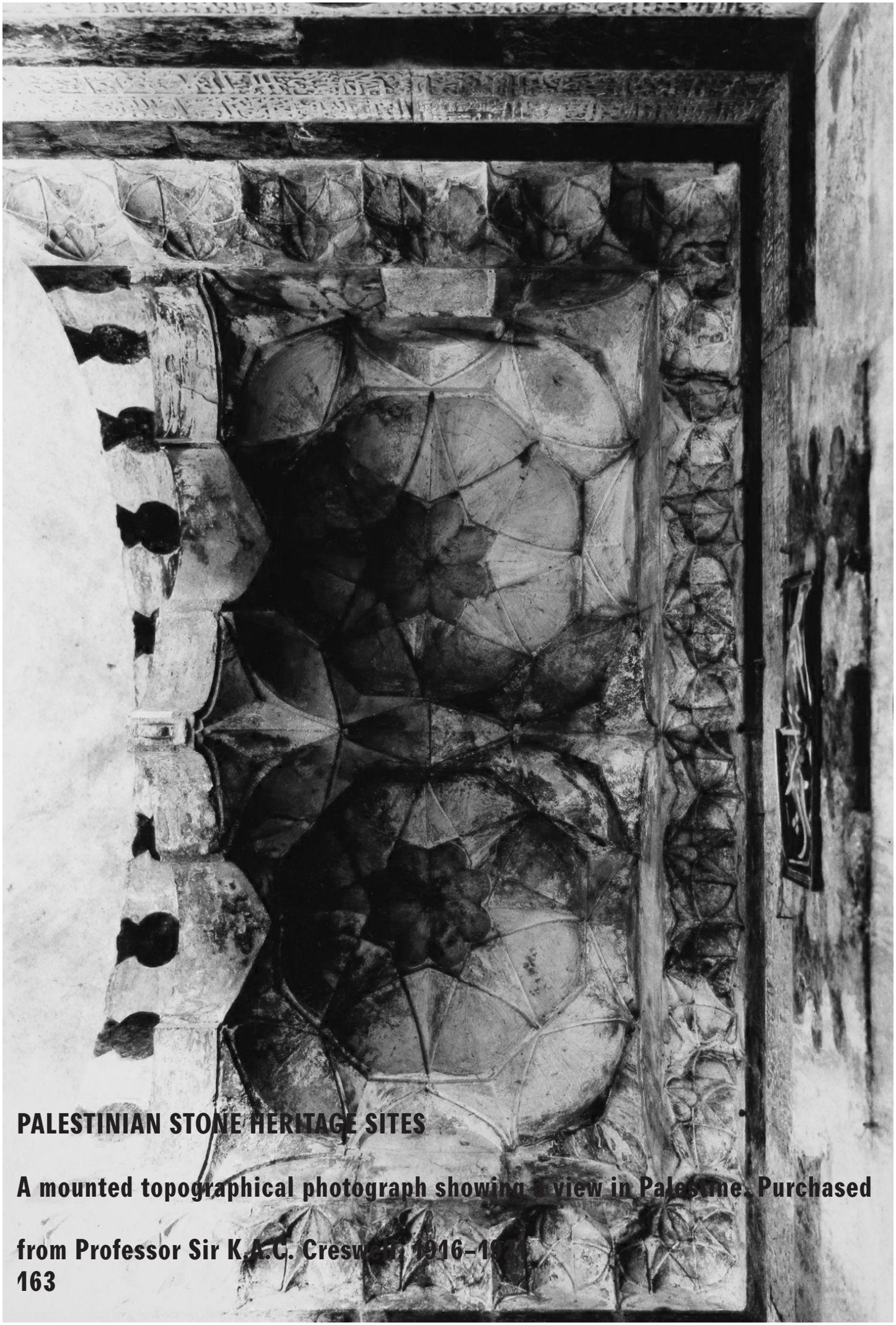

PALESTINIAN STONE HERITAGE SITES

A mounted topographical photograph showing a view in Palestine. Purchased from Professor Sir K.A.C. Creswell, 1916–19
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STONEMASONS ARE SEEN CARVING OUT A NEW CAPITAL DURING

RENOVATIONS TO THE TEMPLE MOUNT IN THE 1940s

Source: G. Eric and Edith Matson Photograph Collection
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PALESTINIAN STONE HERITAGE SITES

Photograph of a fort in Kalansaweh, Palestine, 1916–1921. Purchased from

Professor Sir K.A.C. Creswell, 1921. V & A Collections.
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PALESTINIAN STONE HERITAGE SITES

Photograph of the interior of the ruins at Khan Al Ahmar, near Beisan.

Palestine 1916–1921. V&A Collections.
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LAW OF 1918

In 1918 the British mandate established a bylaw as part of a master plan designed by Sir William Mclean for Jerusalem. The law requires all buildings in Jerusalem to be faced with stone. This law – officially set to create unity in the built landscape – has immediately set new borders to Jerusalem with regards to buildings faced with stone or not. For instance, demographically all neighbourhoods with buildings not made out of stone (mainly Arab neighbourhoods) have been de facto excluded from Jerusalem. Thus its demography has been transformed, having repercussions on the political reclaims of Jerusalem. On another note, when the first Jewish neighbourhoods were built around Jerusalem they were intentionally built out of stone in order to include them in the imagination of Jerusalem. It is also at that same period that stone cladding started proliferating in the construction world in Palestine at a huge pace. Stone became a facing superficial material fulfilling political and territorial agendas. Since then, this law of 1918 has been spread across most of the cities in Palestine. Our contemporary cities are today all built in the same way because with time, the exclusive use of stone for facades created a homogeneous unique way of building that is creating a monotonous contemporary city that is losing landmarks of the history of Palestinian architecture.

Finally, today all stone quarries are located in Palestinian territories called ‘zone C’ (which is a Palestinian zone under Israeli control (Oslo Accords, 1993)), These quarries feed the market in Palestine, Israel, and internationally. As a result, there is an over-exploitation of the stone quarries leading to a spoiling of the landscape and generating harsh sanitary conditions for villages around the quarries. In Israel, there are no stone quarries because the environmental laws are too tough for stone quarries to be financially viable but these laws only exist, de facto, because there is the possibility of overusing stone quarries in Palestinian territories controlled by the occupation.

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